

# Surveys 2023

Reference Institute for Bioanalytics  
Akkredited to DIN EN ISO/IEC 17043



**Quality assurance  
in medical laboratory**

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Dear participant,  
and those interested,

In addition to the requirements of the guideline of the German Medical Association (RiliBÄK), the specifications of the EU In Vitro Diagnostics Regulation (IVDR) present laboratories and manufacturers with new responsibilities. Important elements when implementing these specifications are accuracy of results as well as continuous quality assurance. Surveys are a transparent and independent measure to support you: our analyses provide a straightforward overview of the comparability and precision of the measurement methods used. Additionally, we apply the principle of metrological traceability whenever possible when we carry out our analyses. This enables an objective assessment of the accuracy of the results measured. In this respect, we would like to present the input from our calibration laboratories to you on the following two pages.

Dr. Wolf-Jochen Geilenkeuser has built up and supervised the programme of the Reference Institute for Bioanalytics (RfB) from both a scientific and technical perspective over decades. In recent years, he pursued this task as head of the RfB. We wish to extend our sincere thanks to Dr. Geilenkeuser for his work over these many years! Even in retirement, we are pleased to say that he will continue to offer his expertise in an advisory capacity for the analysis of specific surveys. We are also pleased that we were able to recruit more young colleagues as scientific advisors and staff members of the EQAS Board last year. They are committed to supporting the RfB when it comes to carrying out surveys and are available as competent contacts for any questions you may have.

The experience of the last few years has confirmed that the demands on laboratory medicine are constantly growing and cover a wide spectrum. In order to introduce new surveys in timely and flexible fashion, we initially offer pilot surveys for new analytes and issues before these are then permanently incorporated into our range of services. We will be more than happy to provide you with quick and comprehensive information on this via our website [www.rfb.bio](http://www.rfb.bio) or by e-mail.

We look forward to maintaining our successful working relationship with you!

With best regards on behalf of the RfB team



Dr. Anja Kessler

## Calibration laboratories of RfB

The Reference Institute for Bioanalytics runs two of the few German calibration laboratories for clinical measurands at the Hanover and Cologne sites. The RfB calibration laboratories are accredited by the German Accreditation Body (DAkkS) in accordance with the international standards ISO 15195 and ISO/IEC 17025. All reference measurement procedures used comply with the requirements of the guideline of the German Medical Association. Both, the reference measurement procedures and the services offered are listed internationally by the Joint Committee for Traceability in Laboratory Medicine (JCTLM).

### Service:

On the one hand, the calibration laboratories determine reference measurement procedure values that are used as target values in the control materials for external quality control of the RfB. In this way, they make a significant contribution to testing the analytical quality of routine clinical chemistry laboratory procedures.

Secondly, for external customers in the IVD industry, there is the possibility to determine reference measurement procedure values. Especially for the verification of metrological traceability in terms of the IVD-R, we offer the certification of calibrators, control materials and patient samples and provide assistance on the subject of calibration concepts.

### Analysis spectrum:

Since the development of the first reference measurement procedures for the determination of hormones over 40 years ago, our calibration laboratories have been continuously expanding the range of measurands. Currently, the range includes a total of 35 analytes in the areas of electrolytes, metabolites and substrates, enzymes, hormones, pharmaceuticals as well as proteins (see table).



Dr. Caroline Stobe

Dr. Denis Grote Koska

Further detailed information can be obtained from the email address [info@spmd-rfb.de](mailto:info@spmd-rfb.de) or directly from the heads of the calibration laboratories, Dr. Caroline Stobe (Calibration Laboratory Cologne, [calibrationlab1\\_info@spmd-rfb.de](mailto:calibrationlab1_info@spmd-rfb.de)) and Dr. Denis Grote-Koska (Calibration Laboratory Hanover, [calibrationlab2\\_info@spmd-rfb.de](mailto:calibrationlab2_info@spmd-rfb.de)).

## Services of the RfB calibration laboratories

Analyte	Matrices	Measurement range
17-Hydroxyprogesterone	Serum, plasma	1 – 2500 nmol L <sup>-1</sup>
$\alpha$ -Amylase (AMY)	Serum, plasma	0,058 – 12,0 $\mu$ kat L <sup>-1</sup>
Alanine aminotransferase (ALT)	Serum, plasma	0,072 – 4,75 $\mu$ kat L <sup>-1</sup>
Aldosterone	Serum, plasma	0,05 – 3,5 nmol L <sup>-1</sup>
Alkaline phosphatase (ALP)	Serum, plasma	0,092 – 11,3 $\mu$ kat L <sup>-1</sup>
Aspartate aminotransferase (AST)	Serum, plasma	0,040 – 4,17 $\mu$ kat L <sup>-1</sup>
Bilirubin	Serum, plasma	5 – 525 $\mu$ mol L <sup>-1</sup>
Calcium	Serum, plasma, urine	0,4 – 8 mmol L <sup>-1</sup>
Chloride	Serum, plasma, urine	50 – 290 mmol L <sup>-1</sup>
Cholesterol	Serum, plasma	1 – 10 mmol L <sup>-1</sup>
Cortisol	Serum, plasma	10 – 2000 nmol L <sup>-1</sup>
Creatinine	Serum, plasma	50 – 1000 $\mu$ mol L <sup>-1</sup>
Creatinine	Urine	0,4 – 40 mmol L <sup>-1</sup>
Creatine kinase (CK)	Serum, plasma	0,155 – 24,33 $\mu$ kat L <sup>-1</sup>
Digitoxin	Serum, plasma	0,5 – 100 nmol L <sup>-1</sup>
Digoxin	Serum, plasma	0,1 – 40 nmol L <sup>-1</sup>
Oestradiol (E2)	Serum, plasma	0,01 – 7,5 nmol L <sup>-1</sup>
Oestriol (E3)	Serum, plasma	1 – 500 nmol L <sup>-1</sup>
Glucose	Serum, plasma, urine, blood, CSF	0,5 – 25 mmol L <sup>-1</sup>
Haemoglobin	Blood	20 – 300 g L <sup>-1</sup>
Uric acid	Serum, plasma	50 – 1000 $\mu$ mol L <sup>-1</sup>
Uric acid	Urine	0,1 – 10 mmol L <sup>-1</sup>
Urea	Serum, plasma	0,5 – 50 mmol L <sup>-1</sup>
Urea	Urine	0,5 – 1000 mmol L <sup>-1</sup>
HbA1c	Whole blood, haemolysate	29 – 150 mmol L <sup>-1</sup>
Potassium	Serum, plasma	0,75 – 75 mmol L <sup>-1</sup>
Lactate dehydrogenase (LDH)	Serum, plasma	0,145 – 10 $\mu$ kat L <sup>-1</sup>
Lithium	Serum, plasma, urine	0,05 – 5 mmol L <sup>-1</sup>
Magnesium	Serum, plasma, urine	0,1 – 4 mmol L <sup>-1</sup>
Sodium	Serum, plasma, urine	5 – 200 mmol L <sup>-1</sup>
Progesterone	Serum, plasma	0,1 – 100 nmol L <sup>-1</sup>
Protein (total)	Serum, plasma	10 – 120 g L <sup>-1</sup>
Testosterone	Serum, plasma	1 – 50 nmol L <sup>-1</sup>
Theophylline	Serum, plasma	0,75 – 50 mg L <sup>-1</sup>
Thyroxine (T4)	Serum, plasma	20 – 350 nmol L <sup>-1</sup>
Triglycerides (total)	Serum, plasma	0,5 – 20 mmol L <sup>-1</sup>
Triiodo-L-thyronine (T3)	Serum, plasma	0,5 – 8 nmol L <sup>-1</sup>
$\gamma$ -Glutamyltransferase (GGT)	Serum, plasma	0,032 – 4,58 $\mu$ kat L <sup>-1</sup>

## Topics

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In our current program we have sorted the survey schemes as follows:

- Quantitative determinations
- Qualitative determinations
- Direct detection of pathogens
- Ejaculate investigation
- Molecular- and cytogenetic investigations

Within the individual chapters the survey schemes are listed alphabetically.

In 2023, we will offer the following new surveys/analytes:

### B1

EG (Ethylglucuronide) .....	page 14
The survey was supplemented with the analyte cotinine	

### B3

MRSAscr (MRSA Screening) .....	page 44
The survey was supplemented by the detection of the Panton-Valentine leucocidin	

### B5

The nomenclatures of the following surveys have been changed:

ctDNA (circulating tumor DNA).....	page 50
DI (DNA-isolation).....	page 50
MG1 (Molecular genetic group 1).....	page 51
MG2 (Molecular genetic group 2).....	page 52

Advices and instructions concerning the processes for registration and ordering are described on page 9.

Reference Institute for Bioanalytics is a special purpose operation of the non-profit foundation "Stiftung für Pathobiochemie und Molekulare Diagnostik" and designs and organizes surveys for External Quality Assurance on their behalf and on nomination by the German Medical Association.

If you have any questions concerning External Quality Assessment or our brochure  
please call +49 228 926895-0  
or send us an e-mail info@spmd-rfb.de

The terms and conditions of participation are published at [www.rfb.bio/agb-en.pdf](http://www.rfb.bio/agb-en.pdf) and can be sent on request.



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### Quantitative determinations

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13	DD	D-Dimer
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14	ET	Ethanol
14	FD	Faeces diagnostics
15	GH	Glycated hemoglobin
15	GL	Glucose („wet“ and „POCT/dry chemistry“) (special offer for small laboratories)
15	GR	Coagulation
16	HA	Hematology - Full blood count
16	HB	Hemoglobin and Hematocrit
17	HM	Hormones - group 1
17	HP	Hormones - group 2
17	IG	Serum proteins
18	IS	Immunophenotyping
18	KL	Clinical chemical analytes in cerebrospinal fluid (CSF)
19	KS	Clinical chemical analytes in serum „wet chemistry“
19	KU	Clinical chemical analytes in urine
20	LP	Lipoproteins
20	NBS	Newborn screening
21	OH	Hemoglobin derivates
21	OS	Bone metabolism
21	PH	Photometer control
22	RE	Reticulocytes
22	RF	Rheumatoid factors
23	SA	Thyroid antibodies
23	SD	Pregnancy diagnostic
24	SP	Trace elements in urine
24	SV	Saliva diagnostic
24	SW	Sweat analysis
25	TH	Thrombophilia screening (cooperation with the Dutch organization ECAT)
26	TM	Tumor markers group 1
26	TMX	Tumor markers group 2
27	TR	Clinical chemical analytes in serum „dry chemistry“
27	VT	Vitamins and analgesics
28	ZL	Cell count in cerebrospinal fluid (CSF)
28	ZY	Cytokines

### Qualitative determinations

29	AI	Antinuclear antibodies
29	AL	Allergology
30	BorrBimm	Anti-Borrelia burgdorferi
30	CMVimm	CMV serology
30	CoVimm	SARS-CoV-2 Immunology
30	DF	Hematology - Differential blood count
31	DS	Drug screening in urine
31	EBVimm	Epstein-Barr-Virus serology

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32	HBVimm1	HBV serology Minor
32	HBVimm2	HBV serology Major
32	HCVimm	HCV serology
33	HerpVimm	Herpes viruses serology
33	HIVimm	HIV serology
33	HS	Urinary calculus
34	HTLVimm	Human T-lymphotropic virus
34	IA	Immunohematology automated
34	IH	Immunohematology Major (extended offer)
35	IM	Immunohematology Minor (basic program)
35	KUST	Clinical chemistry in urine, test strip and pregnancy test, qualitative
35	MaMulImm	Morbilli and mumps serology
36	OB	Oligoclonal bands in cerebrospinal fluid (CSF)
36	pvB19imm	pvB19 serology
36	RoetLimm	Anti-Rubella Virus
36	SX	Systematic toxicologic analysis
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38	US	Urine sediment
38	VariAimm	Various immunological analytes
38	ZZ	Cerebrospinal fluid cytology

### Direct detections of pathogens

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39	BakNAT1	Genome evidence group 1
39	BakNAT2	Genome evidence group 2
40	BakNAT3	Genome evidence group 3
40	BAK-TK	Proficiency panel to detect bacteria in platelet concentrates
40	BM	Bacteriology Minor
41	B-Stscre	B-Streptococci screening
41	CdToxin	Clostridium (Clostridioides) difficile toxin genome
41	ChlamTra	Chlamydia trachomatis AG
42	CoVag	Evidence of SARS-CoV-2 antigen
42	CoVpcr	Genome evidence of SARS-CoV-2 and variants of concern
42	CrypCand	Cryptococcus neoformans and candida albicans antigen
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43	HEVpcr	Hepatitis E virus
43	Infl-RSV	Influenza and RSV antigen evidence
44	MMRpcr	Genome evidence measles, mumps, rubella
44	MRGNscre	MRGN screening
44	MRSAscre	MRSA screening
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45	MykIdent	Identification of fungi
45	NoroPCR	Norovirus PCR
45	ParasitB	Parasites in blood
46	ParasitS	Parasites in stool
46	PolyVir1	Genome evidence group 1
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47	ToxoGen	Toxoplasma gondii genome
47	TubDiag	Tuberculosis diagnostics
48	VREscre	VRE screening

### Ejaculate investigation

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### Molecular- and cytogenetic investigation

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Our websites address is:

### **www.rfb.bio**

Open to all interested people, you can find there:

- Information about our current survey program,
- Evaluations of our surveys (target values, statistics, youdenplots, comments on the evaluation etc.),
- Information around the surveys and the Reference Institute for Bioanalytics.

Registered online users have (after login) additional options to handle the participation process:

- Online ordering / cancellation,
- Online data entry, **since July 2020 mandatory for (almost) all surveys**,
- PDF retrieval of:
  - Protocol of the input of results,
  - Certificates / evaluations,
  - Annual summary in terms of,
    - orders,
    - certificates,
    - correctness of findings.
- E-Mail notifications for evaluated surveys with direct links to individual evaluations.
- Reminder e-mails for close survey deadlines.
- Convenient management of multiple participation numbers by “fast user switching” with reduced login effort.
- Shipment options with reduced paper consumption.
- Summary over finished surveys per year with:
  - passed / not rated / not passed analytes,
  - download of complete evaluation / certificates,
  - comment function.
- **To register:**  
Please use the corresponding link on our homepage: “New participant?”  
Already online registered participants can register on our homepage via the link: “Password forgotten?” to request a new password at any time.
- For any questions or comments please contact us via e-mail: [info@spmd-rfb.de](mailto:info@spmd-rfb.de)

## How to order surveys / fees / invoice /notes

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### ► Contract type

RfB offers two different types of contracts for participating in the surveys.

#### ► Contract type A - subscription

If you choose contract type A, then your individual order will automatically be renewed annually as long as you do not cancel subscription.

#### ► Contract type B - yearly order

If you choose contract type B you will get the ordered surveys within one calendar year.  
To receive further surveys for the following year, a new order will be necessary.

### ► Information for application

It is possible to choose either contract type A (permanent subscription) or contract type B (yearly order) for each survey scheme individually.

Participants from Europe with the exception of Germany are requested to specify their VAT (value added tax) number.

### ► Ordering

Surveys of RfB can be ordered on our website [www.rfb.bio](http://www.rfb.bio), or by using the form for the survey TH - Thrombophilia provided in this program. This is possible at any time up to the application deadline of the survey.

### ► Changes of orders

For both types of contracts, any changes of orders are possible up to the application deadline of the corresponding survey.

Together with this program for the next year you will receive an overview of the surveys you already have ordered. This overview could also be used for an order confirmation or changes in your orders.

### ► Fees and invoice

The prices for each survey can be found in the description of the survey scheme in this booklet. These prices are net prices. If the samples of a survey are sent within Germany by standard shipping, these costs are included in the price. If the shipping conditions of Deutsche Post change, price adjustment is possible. All deliveries via parcel service are charged separately.

The invoice is issued after completion of the corresponding survey and includes the net price, any shipping costs incurred and plus the applicable VAT. Taxes and duties are billed separately. Payments can only be made by bank transfer or direct debit.

### ► Notes:

Some parts of the survey (packing / data transfer) can be subcontracted from time to time. When subcontracting occurs, it is in cooperation with a competent subcontractor and the RfB is responsible for this work.

Parts of survey evaluations may be used for publications making note of the origin.

The terms and conditions of participation are published at [www.rfb.bio/agb-en.pdf](http://www.rfb.bio/agb-en.pdf) and can be sent on request.

## Quantitative determinations

### AD - Automatic differential count

Survey	Application deadline	Sample dispatch date	survey period from	to
AD1/23	<b>19.12.22</b>	25.01.23	26.01.23	01.02.23
AD2/23	10.04.23	10.05.23	11.05.23	17.05.23
AD3/23	12.06.23	12.07.23	13.07.23	19.07.23
AD4/23	09.10.23	08.11.23	09.11.23	15.11.23

€ Fee for each survey, net prices plus VAT, plus special freight

► **Sample material**

blood, liquid, 2 samples each 1 ml

► **Analytes**

differential count of the leukocytes with automatic systems  
**not intended for use overseas**

► **Information**

The samples have only a very limited stability and are sent to you with an express or parcel courier.  
The costs will be charged additionally.

### AK - Therapeutic drug monitoring

Survey	Application deadline	Sample dispatch date	survey period from	to
AK1/23	<b>05.12.22</b>	04.01.23	09.01.23	21.01.23
AK2/23	20.03.23	19.04.23	24.04.23	06.05.23
AK3/23	29.05.23	28.06.23	03.07.23	15.07.23
AK4/23	21.08.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized

set 1: 2 samples each 3 ml  
set 2: 2 samples each 3 ml  
set 3: 2 samples each 2 ml

► **Analytes**

**set 1**

carbamazepine  
digoxin  
ethosuximide  
lithium  
phenobarbital

phenytoin  
primidone  
theophylline  
valproic acid

**set 2**

amikacin  
caffeine  
digitoxin  
gentamycin  
methotrexate  
tobramycin  
vancomycin

**set 3**

ampicillin  
cefepime  
ceftazidime  
linezolid  
meropenem  
piperacillin  
sulbactam  
tazobactam

## AM - Ammonia

Survey	Application deadline	Sample dispatch date	survey period from	to
AM1/23	<b>05.12.22</b>	04.01.23	09.01.23	21.01.23
AM2/23	27.02.23	29.03.23	03.04.23	15.04.23
AM3/23	29.05.23	28.06.23	03.07.23	15.07.23
AM4/23	21.08.23	20.09.23	25.09.23	07.10.23

**€ Net prices plus VAT** (Standard shipping within Germany included)

## Sample material

serum or control, liquid, 2 samples each 1-3 ml (depending on the manufacturer of samples)

## Analyte

ammonia

## **BF - Body fluid**

Survey	Application deadline	Sample dispatch date	survey period from	to
BF1/23	<b>19.12.22</b>	24.01.23	25.01.23	01.02.23
BF2/23	10.04.23	09.05.23	10.05.23	17.05.23
BF3/23	12.06.23	11.07.23	12.07.23	19.07.23
BF4/23	11.09.23	10.10.23	11.10.23	18.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

▶ Sample material

Point Preparation, liquid, 2 samples each 2 ml

## Analytes

## Information

For the automatic differential count of the leukocytes please order the survey AD.

## BG - Blood gas

Survey	Application deadline	Sample dispatch date	survey period from	to
BG1/23	<b>12.12.22</b>	11.01.23	16.01.23	28.01.23
BG2/23	06.03.23	04.04.23	11.04.23	22.04.23
BG3/23	19.06.23	19.07.23	24.07.23	05.08.23
BG4/23	18.09.23	18.10.23	23.10.23	04.11.23

**€ Net prices plus VAT** (Standard shipping within Germany included)

## ► Sample material

gas equilibrated solution, liquid, 2 ampoules each 2 ml

## Analytes

pH  
pCO<sub>2</sub>  
pO<sub>2</sub>

calcium, ionized  
chloride  
creatinine  
glucose

lactate  
lithium  
magnesium  
potassium

sodium  
urea

## BI - Neonatal bilirubin

Survey	Application deadline	Sample dispatch date	survey period from	to
BI1/23	09.01.23	01.02.23	06.02.23	18.02.23
BI2/23	20.03.23	19.04.23	24.04.23	06.05.23
BI3/23	05.06.23	05.07.23	10.07.23	22.07.23
BI4/23	28.08.23	27.09.23	02.10.23	14.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 2 ml

► **Analytes**

bilirubin, total

bilirubin, direct

bilirubin, unconjugated

bilirubin, indirect

► **Information**

These specimens contain concentrations of bilirubin which are characteristic in neonatology.

## CM - Cardiac markers

Survey	Application deadline	Sample dispatch date	survey period from	to
CM1/23	19.12.22	25.01.23	30.01.23	11.02.23
CM2/23	20.03.23	19.04.23	24.04.23	06.05.23
CM3/23	05.06.23	05.07.23	10.07.23	22.07.23
CM4/23	21.08.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized  
serum, lyophilized

set 1: 2 samples each 2 ml

set 2: 2 samples each 1 ml

If you only order set 2 you will only receive samples for the determination of BNP.

► **Analytes**

**set 1**

CK-MB mass + activity  
myoglobin

NT-proBNP  
cardiac troponin I

cardiac troponin T  
test strips

**set 2**

BNP

## CMX - Cardiac markers in whole blood

Survey	Application deadline	Sample dispatch date	survey period from	to
CMX1/23	19.12.22	25.01.23	26.01.23	01.02.23
CMX2/23	11.04.23	10.05.23	11.05.23	17.05.23
CMX3/23	12.06.23	12.07.23	13.07.23	19.07.23
CMX4/23	09.10.23	08.11.23	09.11.23	15.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

<b>► Sample material</b>	whole blood, liquid, 2 samples each 1 ml		
<b>► Analytes</b>			
NT-proBNP	cardiac troponin I	cardiac troponin T	

## CS - Immunosuppressives

Survey	Application deadline	Sample dispatch date	survey period from	to
CS1/23	09.01.23	07.02.23	08.02.23	18.02.23
CS2/23	24.07.23	22.08.23	23.08.23	02.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

<b>► Sample material</b>		
hemolyzed blood	set 1: 4 samples each 1,5 ml	
hemolyzed blood	set 2: 2 samples each 1,5 ml	
<b>► Analytes</b>		
set 1	<b>set 2</b>	
cyclosporine	everolimus	
sirolimus		
tacrolimus		

## DD - D-Dimer

Survey	Application deadline	Sample dispatch date	survey period from	to
DD1/23	<b>19.12.22</b>	18.01.23	23.01.23	04.02.23
DD2/23	27.03.23	26.04.23	01.05.23	13.05.23
DD3/23	12.06.23	12.07.23	17.07.23	29.07.23
DD4/23	25.09.23	25.10.23	30.10.23	11.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

<b>► Sample material</b>		
plasma, lyophilized, 2 samples each 1 ml		
<b>► Analyte</b>		
quantitative: D-dimer		
D-dimer (FEU)	qualitative: D-dimer	

## DT - CD Transferrin

Survey	Application deadline	Sample dispatch date	survey period from	to
DT1/23	30.01.23	01.03.23	06.03.23	25.03.23
DT2/23	10.07.23	09.08.23	14.08.23	02.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

<b>► Sample material</b>		
serum, lyophilized, 2 samples each 0,5 ml		
<b>► Analyte</b>		
CDT (Carbohydrate Deficient Transferrin)		

## EG - Ethylglucuronide

Survey	Application deadline	Sample dispatch date	survey period from	to
EG1/23	13.03.23	12.04.23	17.04.23	29.04.23
EG2/23	14.08.23	13.09.23	18.09.23	30.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

urine, lyophilized, 2 samples each 1 ml

► **Analyte**

Ethylglucuronide, Coitinin

## ET - Ethanol

Survey	Application deadline	Sample dispatch date	survey period from	to
ET1/23	<b>19.12.22</b>	18.01.23	23.01.23	04.02.23
ET2/23	20.03.23	19.04.23	24.04.23	06.05.23
ET3/23	19.06.23	19.07.23	24.07.23	05.08.23
ET4/23	11.09.23	11.10.23	16.10.23	28.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, liquid, 2 samples each 2 ml

► **Analyte**

ethanol

## FD - Faeces diagnostics

Survey	Application deadline	Sample dispatch date	survey period from	to
FD1/23	27.02.23	24.05.23	29.05.23	10.06.23
FD2/23	24.07.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

stool, lyophilized, 2 samples each 0,2 ml

► **Analyses**

Hemoglobin iFOBT assay (quantitative, qualitative)  
Hemoglobin / haptoglobin complex (quantitative, qualitative)

Pancrat. Elastase -1 (quantitative, qualitative)  
Calprotectin (quantitative, qualitative)

## GH - Glycated hemoglobin

Survey	Application deadline	Sample dispatch date	survey period from	to
GH1/23	<b>19.12.22</b>	17.01.23	18.01.23	25.01.23
GH2/23	27.03.23	25.04.23	26.04.23	03.05.23
GH3/23	05.06.23	04.07.23	05.07.23	12.07.23
GH4/23	25.09.23	24.10.23	25.10.23	01.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

full blood or hemolysate, 2 samples each 0,3 ml

► **Analytes**

HbA1c

## GL - Glucose (wet and POCT/dry chemistry)

Survey	Application deadline	Sample dispatch date	survey period from	to
GL1/23	<b>05.12.22</b>	04.01.23	09.01.23	21.01.23
GL2/23	13.02.23	15.03.23	20.03.23	01.04.23
GL3/23	15.05.23	14.06.23	19.06.23	01.07.23
GL4/23	21.08.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 2 ml

If special blood specimens are available we will use them instead of serum.

► **Analyte**

glucose

► **Information**

The survey „Glucose“ is offered to laboratories which determine glucose only. If further clinical chemistry analytes are to be determined, participation in a „Clinical chemical analytes in serum“ survey is suggested (KS or TR).

This survey is especially recommended for laboratories and practices using glucose measuring instruments, which operate on the basis of pre-portioned reagents (Unit-use) (e. g. Accucheck, Accutrend, Ascensia Elite, HemoCue etc.).

## GR - Coagulation

Survey	Application deadline	Sample dispatch date	survey period from	to
GR1/23	<b>19.12.22</b>	18.01.23	23.01.23	04.02.23
GR2/23	27.03.23	26.04.23	01.05.23	13.05.23
GR3/23	12.06.23	12.07.23	17.07.23	29.07.23
GR4/23	25.09.23	25.10.23	30.10.23	11.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

plasma, lyophilized, 2 samples each 1 ml

► **Analytes**

antithrombin III (AT III), activity	factor II	factor X
fibrinogen	factor V	factor XI
INR	factor VII	factor XII
prothrombin time (PT, Quick)	factor VIII	factor XIII
activated partial thromboplastin time (aPTT)		
thrombin time	factor IX	

## HA - Hematology - Full blood count

Survey	Application deadline	Sample dispatch date	survey period from	to
HA1/23	02.01.23	31.01.23	01.02.23	08.02.23
HA2/23	10.04.23	09.05.23	10.05.23	17.05.23
HA3/23	12.06.23	11.07.23	12.07.23	19.07.23
HA4/23	11.09.23	10.10.23	11.10.23	18.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

prepared blood, liquid, 2 samples each 2 ml

► **Analytes**

erythrocyte count	leukocyte count	MCV
hematocrit (packed cell volume)	MCH	platelet count
hemoglobin	MCHC	

► **Information**

For the automatic differential count of the leukocytes please order the survey AD.  
These samples can not be used for the investigation with QBC systems.

## HB - Hemoglobin and Hematocrit

Survey	Application deadline	Sample dispatch date	survey period from	to
HB1/23	<b>19.12.22</b>	24.01.23	25.01.23	01.02.23
HB2/23	03.04.23	02.05.23	03.05.23	10.05.23
HB3/23	12.06.23	11.07.23	12.07.23	19.07.23
HB4/23	11.09.23	10.10.23	11.10.23	18.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

prepared blood, liquid, 2 samples each 2 ml

► **Analytes**

hematocrit	hemoglobin
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## HM - Hormones - Group 1

Survey	Application deadline	Sample dispatch date	survey period from	to
HM1/23	<b>05.12.22</b>	04.01.23	09.01.23	28.01.23
HM2/23	27.02.23	29.03.23	03.04.23	22.04.23
HM3/23	22.05.23	21.06.23	26.06.23	15.07.23
HM4/23	14.08.23	13.09.23	18.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 3 ml

► **Analytes**

aldosterone	estradiol-17 $\beta$	17-OH-progesterone	T3, free	T4, total
cortisol	ferritin	TBG	T3, total	TSH
DHEA-S	progesterone	testosterone	T4, free	

► **Information**

Free estriol can be determined only in the survey for pregnancy diagnostic (SD).

## HP - Hormones - Group 2

Survey	Application deadline	Sample dispatch date	survey period from	to
HP1/23	<b>05.12.22</b>	04.01.23	09.01.23	28.01.23
HP2/23	27.02.23	29.03.23	03.04.23	22.04.23
HP3/23	22.05.23	21.06.23	26.06.23	15.07.23
HP4/23	14.08.23	13.09.23	18.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 3 ml

► **Analytes**

ferritin	IGFBP-3	prolactin
folic acid	insulin	renin / renin-activity
FSH	LH	SHBG
hGH (somatotropin/growth hormone)	parathyroid hormone, intact (PTH)	vitamin B <sub>12</sub>
IGF-1	parathyroid hormone, bio-intact (PTH 1-84)	

## IG - Serum proteins

Survey	Application deadline	Sample dispatch date	survey period from	to
IG1/23	<b>19.12.22</b>	17.01.23	23.01.23	04.02.23
IG2/23	13.03.23	11.04.23	17.04.23	29.04.23
IG3/23	29.05.23	27.06.23	03.07.23	15.07.23
IG4/23	21.08.23	19.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, liquid, 2 samples each 1 ml

► **Analytes**

albumin	CRP	haptoglobin	IgM
$\alpha_1$ -antitrypsin	cystatin C	IgA	prealbumin
$\alpha_1$ -glycoprotein	C3 complement	IgE	transferrin
coeruloplasmin	C4 complement	IgG	sol. transferrin receptor

CRP qualitative

## IS - Immunophenotyping (flow cytometry)

Survey	Application deadline	Sample dispatch date	survey period from	to
IS1/23	23.01.23	20.02.23	21.02.23	23.02.23
IS2/23	07.08.23	04.09.23	05.09.23	07.09.23

€ Fee for each survey, net prices plus VAT, plus special freight

► **Sample material**

prepared blood samples, liquid, 2 samples with different analyte concentrations each about 2 ml

► **Analytes**

B-cells	NK-cells	T-suppressor cells
leukocyte count	T-cells	HLA-B *27
lymphocyte count	T-helper cells	

► **Information**

The samples have only a very limited stability and are sent to you with an express or parcel courier. The costs will be charged additionally.

## KL - Clinical chemical analytes in cerebrospinal fluid (CSF)

Survey	Application deadline	Sample dispatch date	survey period from	to
KL1/23	12.12.22	11.01.23	16.01.23	28.01.23
KL2/23	20.02.23	22.03.23	27.03.23	08.04.23
KL3/23	15.05.23	14.06.23	19.06.23	01.07.23
KL4/23	21.08.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

CSF, lyophilized serum, lyophilized 2 samples each 3 ml  
2 samples each 1 ml

► **Analytes**

albumin	glucose	IgG	IgM	indices
total protein	lactate	IgA	quotients	diagnoses

► **Information**

The additional serum samples serve to calculate the corresponding quotients.

## KS - Clinical chemical analytes in serum „wet chemistry“

Survey	Application deadline	Sample dispatch date	survey period from	to
KS1/23	<b>05.12.22</b>	04.01.23	09.01.23	14.01.23
KS2/23	09.01.23	08.02.23	13.02.23	18.02.23
KS3/23	20.02.23	22.03.23	27.03.23	01.04.23
KS4/23	03.04.23	03.05.23	08.05.23	13.05.23
KS5/23	22.05.23	21.06.23	26.06.23	01.07.23
KS6/23	03.07.23	02.08.23	07.08.23	12.08.23
KS7/23	04.09.23	04.10.23	09.10.23	14.10.23
KS8/23	09.10.23	08.11.23	13.11.23	18.11.23

€ Fee for each survey inclusive sample material, net prices plus VAT

### ► Sample material

serum, lyophilized, 2 samples each 5 ml

### ► Analytes

α-amylase	CK, creatine kinase	lipase
α-HBDH, lactate dehydrogenase-1-isoenzyme	iron	lithium
albumin (chem.)	γ-globulin (electrophoresis)	magnesium
albumin (elektrophoresis)	γ-GT, L-γ-glutamyl-transferase	sodium
alkaline phosphatase	protein, total	osmolality
ALT, alanine aminotransferase (GPT)	GLDH, glutamate dehydrogenase	pancreatic amylase
AST, aspartate aminotransferase (GOT)	glucose	phosphorus, inorganic
bilirubin, direct	uric acid	acid phosphatase, total
bilirubin, total	urea	acid phosphatase, prostate (only enzyme activity)
calcium	potassium	triglycerides
calcium, ionized	creatinine	
chloride	copper	
cholesterol	lactate	
cholinesterase	LDH, lactate dehydrogenase	

## KU - Clinical chemical analytes in urine

Survey	Application deadline	Sample dispatch date	survey period from	to
KU1/23	<b>12.12.22</b>	11.01.23	16.01.23	28.01.23
KU2/23	20.02.23	22.03.23	27.03.23	08.04.23
KU3/23	15.05.23	14.06.23	19.06.23	01.07.23
KU4/23	21.08.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

### ► Sample material

urine, lyophilized, 2 samples each 5 ml

## ► Analytes

albumin	urea	<b>Test strip</b>	
α1-microglobulin	IgG	bilirubin	nitrite
α2-macroglobulin	potassium	ketone	specific gravity
calcium, total	creatinine	pH	urobilinogen
chloride	magnesium	protein	
citrate	sodium	glucose	
protein, total	osmolality	hemoglobin	
glucose	oxalate	leukocytes	
uric acid	phosphorus, inorganic	microalbumin	

## ► Information

The test for pregnancy from urine will be offered in a separate survey. Please see at KUST. A diagnosis of proteinuria can also be given. Clinical information will be available.

## LP - Lipoproteins

Survey	Application deadline	Sample dispatch date	survey period from	to
LP1/23	02.01.23	01.02.23	06.02.23	18.02.23
LP2/23	20.03.23	19.04.23	24.04.23	06.05.23
LP3/23	05.06.23	05.07.23	10.07.23	22.07.23
LP4/23	28.08.23	27.09.23	02.10.23	14.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

## ► Sample material

serum, lyophilized, 2 samples each 3 ml

## ► Analytes

apolipoproteins (A, B)	homocysteine	lipoprotein(a)
cholesterol	LDL	triglycerides
HDL		

## NBS - Newborn screening

Survey	Application deadline	Sample dispatch date	survey period from	to
NBS1/23	<b>19.12.22</b>	25.01.23	30.01.23	18.02.23
NBS2/23	06.03.23	04.04.23	11.04.23	29.04.23
NBS3/23	29.05.23	28.06.23	03.07.23	22.07.23
NBS4/23	14.08.23	13.09.23	18.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

## ► Sample material

filter papers, each with 2 dried blood spots

## ► Analytes

TSH
17-OH-progesterone
IRT
PAP

## OH - Hemoglobin derivates

Survey	Application deadline	Sample dispatch date	survey period from	to
OH1/23	<b>12.12.22</b>	11.01.23	16.01.23	28.01.23
OH2/23	06.03.23	04.04.23	11.04.23	22.04.23
OH3/23	19.06.23	19.07.23	24.07.23	05.08.23
OH4/23	18.09.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

hemolysate, 2 samples each 0.5 ml

► **Analytes**

hemoglobin (total)  
oxyhemoglobin ( $\text{HbO}_2$ )

carboxyhemoglobin (COHb)  
methemoglobin (metHb)

## OS - Bone metabolism

Survey	Application deadline	Sample dispatch date	survey period from	to
OS1/23	13.03.23	12.04.23	17.04.23	29.04.23
OS2/23	31.07.23	30.08.23	04.09.23	16.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 2 ml

► **Analytes**

osteocalcin  
bone specific alkaline phosphatase (BAP)

CTX (CrossLaps)  
P1NP

## PH - Photometer control

Survey	Application deadline	Sample dispatch date	survey period from	to
PH1/23	<b>19.12.22</b>	25.01.23	30.01.23	11.02.23
PH2/23	24.07.23	23.08.23	28.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

watery coloured solutions, 6 ampoules each 10 ml

► **Wave lengths**

260 nm	340 nm	546 nm
280 nm	365 / 366 nm	560 nm
334 nm	405 nm	

► **Information**

The participant measures the absorption of the coloured solutions.

The survey is an instrument control and can also aid in detecting the smaller inaccuracies of a photometer before they are identified in analyses results.

Only the wave lengths listed can be tested.

## RE - Reticulocytes

Survey	Application deadline	Sample dispatch date	survey period from	to
RE1/23	<b>28.11.22</b>	31.01.23	01.02.23	08.02.23
RE2/23	06.03.23	09.05.23	10.05.23	17.05.23
RE3/23	08.05.23	11.07.23	12.07.23	19.07.23
RE4/23	07.08.23	10.10.23	11.10.23	18.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

blood preparation, liquid, 2 samples each about 1 ml

► **Analyte**

reticulocyte count

► **Information**

The samples can be used for a counting by visual microscopy or by automated cell counting.

## RF - Rheumatoid factors

Survey	Application deadline	Sample dispatch date	survey period from	to
RF1/23	16.01.23	15.02.23	20.02.23	04.03.23
RF2/23	03.04.23	03.05.23	08.05.23	20.05.23
RF3/23	26.06.23	26.07.23	31.07.23	12.08.23
RF4/23	28.08.23	27.09.23	02.10.23	14.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 1 ml

► **Analytes**

**set 1**

rheumatoid factors qualitative and quantitative

anti-CCP-Ab (anti-cyclic citrullinated peptide antibodies)

IgA-RF

IgG-RF

IgM-RF

**set 2**

anti-streptolysin O qualitative and quantitative

## SA - Thyroid antibodies

Survey	Application deadline	Sample dispatch date	survey period from	to
SA1/23	<b>05.12.22</b>	01.03.23	06.03.23	18.03.23
SA2/23	08.05.23	02.08.23	07.08.23	19.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 1 ml

► **Analytes**

TSH-R Ab:	thyrotropin-receptor antibodies (TR Ab)
TPO Ab:	thyroid peroxidase antibodies (TPO Ab)
TG Ab:	thyroglobulin antibodies (TG Ab)

## SD - Pregnancy diagnostic

Survey	Application deadline	Sample dispatch date	survey period from	to
SD1/23	<b>05.12.22</b>	04.01.23	09.01.23	28.01.23
SD2/23	27.02.23	29.03.23	03.04.23	22.04.23
SD3/23	22.05.23	21.06.23	26.06.23	15.07.23
SD4/23	14.08.23	13.09.23	18.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized	set 1: 2 samples each 2 ml
	set 2: 2 samples each 1 ml

In set 2 (free estriol) nativ, human samples are used.

► **Analytes**

**set 1**  
 AFP  
 anti-Müllerian hormone (AMH)  
 hCG  
 free β-hCG  
 PAPP-A  
**set 2**  
 free estriol

► **Information**

The samples offered in this survey will contain analytes in a concentration range relevant for pregnancy diagnostic. For the qualitative test for pregnancy please order the survey KUST.

## SP - Trace elements in urine

Survey	Application deadline	Sample dispatch date	survey period from	to
SP1/23	16.01.23	15.02.23	20.02.23	11.03.23
SP2/23	03.07.23	02.08.23	07.08.23	26.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

urine, lyophilized, 2 samples each 10 (2 × 5) ml

► **Analytes**

aluminium	chromium	fluoride	manganese	selenium
arsenic	cobalt	iron	mercury	zinc
cadmium	copper	lead	<td></td>	

## SV - Saliva diagnostic

Survey	Application deadline	Sample dispatch date	survey period from	to
SV1/23	06.03.23	04.04.23	11.04.23	22.04.23
SV2/23	31.07.23	30.08.23	04.09.23	16.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

saliva preparation, liquid or lyophilized, 2 samples each 2 ml

► **Analytes**

cortisol, 17-OH-progesterone

## SW - Sweat analysis

Survey	Application deadline	Sample dispatch date	survey period from	to
SW1/23	13.02.23	15.03.23	20.03.23	01.04.23
SW2/23	10.07.23	09.08.23	14.08.23	26.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

sweat preparation, liquid or lyophilized, 2 samples each 1 ml

► **Analytes**

chloride, conductivity

## TH - Thrombophilia screening

Survey	Application deadline	Dispatch date	Closing date
TH1/23		07.03.23	13.04.23
TH2/23	09.12.22	23.05.23	27.06.23
TH3/23		29.08.23	03.10.23
TH4/23		07.11.23	12.12.23

€ Net prices plus VAT (Standard shipping within Germany included)

Please note, that you can only place one order comprising all two or four surveys of the scheme  
Ordering a single survey (one/two times a year) is not possible in this case.

Result submission via internet/report internet, annual subscription fee  
Result submission via internet/report internet+post, annual subscription fee

### ► Sample material

plasma or serum, human, lyophilized, ca. 0,5 - 1 ml (1 or 2 sample(s) each)

### ► Analytes 4 per year: TH1/23, TH2/23, TH3/23, TH4/23

#### Thrombophilia module I

Includes an annual report on the long-term evaluation of test results.

Antithrombin (activity and antigen)

Protein S activity

Protein C (activity [chromogenic and clotting] and antigen)

Protein S antigen (free and total)

#### Thrombophilia module II (APC Resistance)

#### Lupus Anticoagulant / Antiphospholipide Antibodies

Von Willebrand Factor module (antigen, ristocetin cofactor activity, activity, collagen binding, multimers, Factor VIII)

#### ADAMTS-13 - I (activity and antigen)

#### Factor XIII (activity and antigen)

#### Fibrinolysis parameters I (Plasminogen, Antiplasmin)

#### Fibrinolysis parameters II (t-PA, PAI-1)

#### Unfractionated Heparin Monitoring (anti-Xa)

#### Low-Molecular Weight heparin Monitoring (anti-Xa)

### ► Analytes 2 per year:

Faktor VIII Inhibitor (TH2/23 + TH4/23)

Thrombin Generation Test (TH2/23 + TH4/23)

ADAMTS-13 - II (antibodies) (TH2/23 + TH4/23)

Faktor IX Inhibitor (TH1/23 + TH3/23)

HIT - I Immunological testing (TH1/23 + TH3/23)

### ► Analytes 1 per year:

ADAMTS-13 - III (functional inhibitor) (TH2/23)

## ► Information

In cooperation with the Dutch organization ECAT the Reference Institute for Bioanalytics provides special surveys for thrombophilia screening.

The preparation of the survey material, what is in most cases native patient material, the mailing of samples and the evaluation is done by our colleagues from the Netherlands.

### Sample material

The samples will consist of lyophilized human plasma or serum with different volume (0,5 to 1 ml).

Per analyte or set of analytes you will get one or two sample(s).

Please note our deadline for the order and please use for the applications the special application form! We can not accept cancellations during the annual programme.

The result submission is only possible via internet.

This survey is not subject of the accredited area of the RfB.

The registration form for this survey you will find on page 63/64.

## TM - Tumor markers group 1

Survey	Application deadline	Sample dispatch date	survey period from	to
TM1/23	<b>05.12.22</b>	04.01.23	09.01.23	28.01.23
TM2/23	27.02.23	29.03.23	03.04.23	22.04.23
TM3/23	22.05.23	21.06.23	26.06.23	15.07.23
TM4/23	14.08.23	13.09.23	18.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

### ► Sample material

serum, lyophilized, 2 samples each 2,5 ml

### ► Analytes

AFP	calcitonin	β-2-microglobulin	S-100
CA 15-3	CEA	PAP (only mass concentration, no enzyme activity)	SCC
CA 19-9	CYFRA	PSA	thyroglobulin
CA 72-4	hCG	cPSA (complexed PSA)	TPA
CA 125	NSE	PSA free	TPS

## TMX - Tumor markers group 2

Survey	Application deadline	Sample dispatch date	survey period from	to
TMX1/23	<b>05.12.22</b>	04.01.23	09.01.23	28.01.23
TMX2/23	27.02.23	29.03.23	03.04.23	22.04.23
TMX3/23	22.05.23	21.06.23	26.06.23	15.07.23
TMX4/23	14.08.23	13.09.23	18.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

### ► Sample material

serum, lyophilized, 2 samples each 1 ml

### ► Analytes

chromogranin A	human epidermal growth factor receptor 2	CA 50
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## TR - Clinical chemical analytes in serum „dry chemistry“

Survey	Application deadline	Sample dispatch date	survey period from	to
TR1/23	<b>05.12.22</b>	04.01.23	09.01.23	21.01.23
TR2/23	13.02.23	15.03.23	20.03.23	01.04.23
TR3/23	29.05.23	28.06.23	03.07.23	15.07.23
TR4/23	25.09.23	25.10.23	30.10.23	11.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

### ► Sample material

serum, lyophilized, 2 samples each 5 ml

### ► Analytes

α-amylase	iron	lithium
albumin	γ-GT, L-γ-glutamyl transferase	magnesium
alkaline phosphatase	protein, total	sodium
ALT, alanine-aminotransferase (GPT)	glucose	pancreatic amylase
AST, aspartate-aminotransferase (GOT)	uric acid	phosphorus inorganic
bilirubin, total	urea	triglycerides
calcium	potassium	
chloride	creatinine	
cholesterol	lactate	
cholinesterase	LDH, lactate dehydrogenase	
CK, creatine kinase	lipase	

### ► Information

This offer is addressed to users of Vitros and Reflotron systems and other „dry chemistry“ instruments.

## VT - Vitamins and analgesics

Survey	Application deadline	Sample dispatch date	survey period from	to
VT1/23	30.01.23	01.03.23	06.03.23	18.03.23
VT2/23	03.07.23	02.08.23	07.08.23	19.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

### ► Sample material

serum, lyophilized, 2 samples each 3 ml

### ► Analytes

vitamin A	(retinol)	folic acid
vitamin B <sub>6</sub>	(pyridoxal-5-phosphate)	salicylic acid
vitamin B <sub>12</sub>	(cyanocobalamin)	paracetamol / acetaminophen
vitamin B <sub>1</sub>	(thiamine)	
vitamin D	25-OH-D3 (25-OH-cholecalciferol), 25-(OH) <sub>2</sub> -D3 and 25-OH-vitamin D total	
vitamin E	(tocopherol)	

## ZL - Cell count in cerebrospinal fluid (CSF)

Survey	Application deadline	Sample dispatch date	survey period from	to
ZL1/23	<b>28.11.22</b>	01.03.23	06.03.23	11.03.23
ZL2/23	12.06.23	13.09.23	18.09.23	23.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

punctuated, liquid, 2 samples each about 2 ml

► **Analytes**

erythrocyte count  
leukocyte count

► **Information**

In this survey erythrocytes (RBC) and leukocytes (WBC) can be counted with visual methods (microscope) or electronic methods from a cerebrospinal fluid. This survey is only addressed to methods that can detect erythrocytes < 500/ $\mu$ l. If the detection limit of the method for erythrocytes = 1,000/ $\mu$ l, participation in the survey Bodyfluid (BF) is recommended.

## ZY - Cytokines

Survey	Application deadline	Sample dispatch date	survey period from	to
ZY1/23	16.01.23	15.02.23	20.02.23	04.03.23
ZY2/23	27.03.23	26.04.23	01.05.23	13.05.23
ZY3/23	26.06.23	26.07.23	31.07.23	12.08.23
ZY4/23	25.09.23	25.10.23	30.10.23	11.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized, 2 samples each 2 ml

► **Analytes**

Interleukin-1 $\beta$ (IL-1 $\beta$ )	lipopolysaccharide-binding-protein (LBP)
Interleukin-6 (IL-6)	procalcitonin (PCT)
Interleukin-8 (IL-8)	soluble IL-2 receptor (sIL-2R)
Interleukin-10 (IL-10)	tumor necrosis factor-alpha (TNF $\alpha$ )

PCT-POCT  
IL-6-POCT

## Qualitative determinations

### AI - Antinuclear antibodies

Survey	Application deadline	Sample dispatch date	survey period from	to
AI1/23	<b>12.12.22</b>	22.02.23	27.02.23	11.03.23
AI2/23	19.06.23	30.08.23	04.09.23	16.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum/plasma, lyophilized  
set 1: about 6 samples each 0,5 ml  
set 2: about 6 samples each 0,5 ml

► **Analytes**

<b>set 1</b>	<b>set 2</b>
ANA (antinuclear ab)	AMA (antimitochondrial ab)
ENA (extractable antinuclear ab)	SMA (smooth muscle ab)
ds-DNA-ab	LKM-1 (liver-kidney-microsomes)
ANCA (antineutrophil cytoplasmatic ab)	GBM (glomerular base membran ab)
	Antiphospholipide ab
	Celiak disease ab
	Onconeural ab

### AL - Allergology

Survey	Application deadline	Sample dispatch date	survey period from	to
AL1/23	09.01.23	08.02.23	13.02.23	25.02.23
AL2/23	03.04.23	03.05.23	08.05.23	20.05.23
AL3/23	26.06.23	26.07.23	31.07.23	12.08.23
AL4/23	28.08.23	27.09.23	02.10.23	14.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, lyophilized      set 1: 2 samples each 1 ml      for IgE total  
 serum, lyophilized      set 2: 2 samples each 1 ml      for specific IgE antibodies  
 The volume of the specimens can be different depending on the producer.

The samples for the determination of specific IgE-antibodies (set 2) contain seasonal and perennial allergens from inhalation, food and insects. Expected the following allergens will be offered (changes may be possible):  
 AL1/23: mite (d1), Peanut (f13), alder (t2), honey bee venom (i1), cultivated rye (g12), cat dander (e1)  
 AL2/23: dog epithelia (e2), salmon (f41), maple (t1), wasp venom (i3), ribwort plantain (w9), mugwort (w6)  
 AL3/23: mite (d2), apple (f49), birch (t3), honey bee venom (i1), barley (g18), hazelnut (f17)  
 AL4/23: cat dander (e1), walnut (f16), hazelnut (t4), wasp venom (i3), common ragweed (w1), ribwort plantain (w9)

► **Analytes**

IgE      specific IgE antibodies

► **Information**

From a large number of possible IgE-antibodies we will supply changing groups of antibodies for investigation. It is also possible to give a classification of the stage of sensitisation.

## BorrBimm - Anti-Borrelia burgdorferi

Survey	Application deadline	Sample dispatch date	survey period from	to
BorrBimm1/23	17.04.23	24.05.23	29.05.23	10.06.23
BorrBimm2/23	17.07.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-Borrelia burgdorferi IgG, including confirmation test	Anti-Borrelia burgdorferi IgM	Anti-Borrelia burgdorferi total
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## CMVimm - CMV Serology

Survey	Application deadline	Sample dispatch date	survey period from	to
CMVimm1/23	02.01.23	08.03.23	13.03.23	25.03.23
CMVimm2/23	19.06.23	23.08.23	28.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-CMV IgG + total	Anti-CMV IgM
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## CoVimm - SARS-CoV-2 Immunology

Survey	Application deadline	Sample dispatch date	survey period from	to
CoVimm1/23	13.03.23	17.05.23	22.05.23	27.05.23
CoVimm2/23	07.08.23	11.10.23	16.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples 0,4 - 0,6 ml of defibrinated serum

► **Analytes**

Anti-SARS-CoV-2 total	Anti-S (Spike-protein) total	Anti-N (Nucleocapsid) total
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## DF - Hematology - Differential blood count

Survey	Application deadline	Sample dispatch date	survey period from	to
DF1/23	<b>19.12.22</b>	18.01.23	23.01.23	04.02.23
DF2/23	20.03.23	19.04.23	24.04.23	06.05.23
DF3/23	12.06.23	12.07.23	17.07.23	29.07.23
DF4/23	21.08.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

2 blood slides, **stained** Pappenheim. Both slides are normally also available by smears of virtual microscopy.

## DS - Drug screening in urine

Survey	Application deadline	Sample dispatch date	survey period from	to
DS1/23	09.01.23	08.02.23	13.02.23	25.02.23
DS2/23	03.04.23	03.05.23	08.05.23	20.05.23
DS3/23	19.06.23	19.07.23	24.07.23	05.08.23
DS4/23	25.09.23	25.10.23	30.10.23	11.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

urine, lyophilized, 2 samples each 10 ml

► **Analytes**

amphetamine	(about 30 different)	methadon/metab.
barbiturates	(about 30 different)	methylphenidate
benzodiazepines	(about 50 different)	opiates/opioide
buprenorphine		phencyclidine
cannabinoids		pregabalin
cocain/metab.		tramadol
fentanyl		tricycl. antidepressants
LSD		(about 10 different)

► **Information**

Per survey the samples do contain selected drugs from a lot of substances of a drug group.

The parameters specified in this survey are to be determined primarily by means of qualitative immunoassays. In this survey, users of chromatographic methods are required to merely provide the confirmatory analysis for one lead compound. We offer systematic toxicological analysis in the SX survey as well in the TX survey, which is additionally to be assessed clinically with a case history.

## EBVimm - Epstein-Barr-Virus serology

Survey	Application deadline	Sample dispatch date	survey period from	to
EBVimm1/23	16.01.23	22.02.23	27.02.23	11.03.23
EBVimm2/23	17.07.23	23.08.23	29.08.23	10.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

plasma, 4 samples, each 500 µl

► **Analytes**

EBV-EBNA	IgG
EBV-VCA	IgG + IgM
EBV-EA (early antigen)	IgG

## HAVimm - HAV serology

<b>Survey</b>	<b>Application deadline</b>	<b>Sample dispatch date</b>	<b>survey period from</b>	<b>to</b>
HAVimm1/23	02.01.23	08.03.23	13.03.23	25.03.23
HAVimm2/23	19.06.23	23.08.23	28.08.23	09.09.23

**€ Net prices plus VAT** (Standard shipping within Germany included)

## ► Sample material

4 liquid samples of defibrinated plasma or serum

## Analytes

**HBVimm1 - HBV serology minor**

Survey	Application deadline	Sample dispatch date	survey period from	to
HBVimm11/23	02.01.23	08.03.23	13.03.23	25.03.23
HBVimm12/23	19.06.23	23.08.23	28.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

## ► Sample material

4 liquid samples of defibrinated plasma or serum

▶ Analytes

HBsAg                          Anti-HBs                          Anti-HBc

**HBVimm2 - HBV serology major**

Survey	Application deadline	Sample dispatch date	survey period from	to
HBVimm21/23	02.01.23	08.03.23	13.03.23	25.03.23
HBVimm22/23	19.06.23	23.08.23	28.08.23	09.09.23

**€ Net prices plus VAT** (Standard shipping within Germany included)

## Sample material

4 liquid samples of defibrinated plasma or serum

▶ Analytes

HBsAg                    Anti-HBc                    Anti-HBe  
Anti-HBs                HBe                        Anti-HBc-IgM

## HCVimm - HCV serology

Survey	Application deadline	Sample dispatch date	survey period from	to
HCVimm1/23	02.01.23	08.03.23	13.03.23	25.03.23
HCVimm2/23	19.06.23	23.08.23	28.08.23	09.09.23

**€ Net prices plus VAT (Standard shipping within Germany included)**

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-HCV IgG + IgM

## HerpVimm - Herpes viruses serology

Survey	Application deadline	Sample dispatch date	survey period from	to
HerpVimm1/23	16.01.23	22.02.23	27.02.23	11.03.23
HerpVimm2/23	17.07.23	23.08.23	29.08.23	10.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

plasma, 4 samples, each 500 µl

► **Analytes**

Set 1: Anti-HSV 1/2, IgG + IgM

Set 2: Anti- VZV, IgG + IgM

## HIVimm - HIV serology

Survey	Application deadline	Sample dispatch date	survey period from	to
HIVimm1/23	02.01.23	08.03.23	13.03.23	25.03.23
HIVimm2/23	19.06.23	23.08.23	28.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-HIV 1/2 Ak / Ag(p24)

## HS - Urinary calculus

Survey	Application deadline	Sample dispatch date	survey period from	to
HS1/23	09.01.23	08.02.23	13.02.23	25.02.23
HS2/23	03.07.23	02.08.23	07.08.23	19.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples of pulverized urinary calculus components (pure, mixed, human stones)

► **Information**

Together with the evaluation of the survey you will get IR-spectra, which you can collect for an IR-catalog.

## HTLVimm - Human T-lymphotropic virus

Survey	Application deadline	Sample dispatch date	survey period from	to
HTLVimm1/23	09.01.23	08.02.23	13.02.23	25.02.23
HTLVimm2/23	03.07.23	02.08.23	07.08.23	19.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

lyophilized plasma, 4 samples

► **Analyt**

Anti-HTLV 1/2 IgG

## IA - Immunohematology for automated systems

Survey	Application deadline	Sample dispatch date	survey period from	to
IA1/23	02.01.23	31.01.23	01.02.23	11.02.23
IA2/23	20.03.23	18.04.23	19.04.23	29.04.23
IA3/23	26.06.23	25.07.23	26.07.23	05.08.23
IA4/23	22.09.23	17.10.23	18.10.23	28.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

whole blood, liquid 2 samples each about 2,5 ml

► **Analytes**

AB0-system (blood groups)	Cw antigen
A-subgroups	Kell antigen
rhesus-factor (D-variants)	direct Coombs' test
rhesus-system (rhesus-formula)	antibody test

## IH - Immunohematology Major (extended offer)

Survey	Application deadline	Sample dispatch date	survey period from	to
IH1/23	16.01.23	14.02.23	15.02.23	25.02.23
IH2/23	27.03.23	25.04.23	26.04.23	06.05.23
IH3/23	29.05.23	27.06.23	28.06.23	08.07.23
IH4/23	04.09.23	02.10.23	04.10.23	14.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

erythrocyte suspension, liquid	2 samples each about 2 ml
serum, liquid	2 samples each about 6 ml

► **Analytes**

AB0-system (blood groups)	Cw antigen	antibody differentiation (serum)
A-subgroups	Kell antigen	antibody titer
rhesus-factor (D-variants)	direct Coombs' test	
rhesus-system (rhesus-formula)	antibody test	

► **Information**

In this survey - in addition to the analytes of the basic program (Minor) - includes antibody differentiation.

## IM - Immunohematology Minor (basic programm)

Survey	Application deadline	Sample dispatch date	survey period from	to
IM1/23	16.01.23	14.02.23	15.02.23	25.02.23
IM2/23	27.03.23	25.04.23	26.04.23	06.05.23
IM3/23	29.05.23	27.06.23	28.06.23	08.07.23
IM4/23	04.09.23	02.10.23	04.10.23	14.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

erythrocyte suspension, liquid  
serum, liquid

2 samples about 2 ml  
2 samples about 3 ml

► **Analytes**

AB0-system (blood groups)  
A-subgroups  
rhesus-factor (D-variants)

rhesus-system (rhesus-formula)  
Cw antigen

Kell antigen  
direct Coombs' test  
antibody test

## KUST - Clinical chemistry in urine, test strip and pregnancy test, qualitative

Survey	Application deadline	Sample dispatch date	survey period from	to
KUST1/23	<b>12.12.22</b>	11.01.23	16.01.23	28.01.23
KUST2/23	20.02.23	22.03.23	27.03.23	08.04.23
KUST3/23	15.05.23	14.06.23	19.06.23	01.07.23
KUST4/23	21.08.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

urine, lyophilized qualitative, 2 samples each 5 ml, investigation for test strips

► **Analytes**

**Test strip**  
bilirubin  
ketone  
pH

protein  
glucose  
microalbumin  
hemoglobin

leukocytes  
nitrite  
specific gravity  
urobilinogen

**pregnancy test**

## MaMulImm - Morbilli and mumps serology

Survey	Application deadline	Sample dispatch date	survey period from	to
MaMulImm1/23	16.01.23	22.02.23	27.02.23	11.03.23
MaMulImm2/23	17.07.23	23.08.23	29.08.23	10.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

plasma, 4 samples, each 500 µl

► **Analytes**

set 1: anti morbilli virus IgG + IgM  
set 2: anti mumps virus IgG + IgM

## OB - Oligoclonal bands in cerebrospinal fluid (CSF)

Survey	Application deadline	Sample dispatch date	survey period from	to
OB1/23	30.01.23	01.03.23	06.03.23	25.03.23
OB2/23	17.07.23	16.08.23	21.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

CSF, lyophilized or liquid serum, lyophilized or liquid

2 samples each 1 ml  
2 samples each 1 ml

► **Analytes**

oligoclonal bands in cerebrospinal fluid; diagnosis can be given.

## pvB19imm - Parvovirus B19 serology

Survey	Application deadline	Sample dispatch date	survey period from	to
pvB19imm1/23	02.01.23	08.03.23	13.03.23	25.03.23
pvB19imm2/23	19.06.23	23.08.23	28.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-Parvovirus B19 IgG + total

Anti-Parvovirus B19 IgM

## RoetLimm - Anti-Rubella-Virus

Survey	Application deadline	Sample dispatch date	survey period from	to
RoetLimm1/23	17.04.23	24.05.23	29.05.23	10.06.23
RoetLimm2/23	17.07.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-Rubella-Virus IgG

Anti-Rubella-Virus IgM

## SX - Systematic toxicologic analysis

Survey	Application deadline	Sample dispatch date	survey period from	to
SX1/23	20.03.23	19.04.23	24.04.23	13.05.23
SX2/23	10.07.23	09.08.23	14.08.23	02.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

urine, lyophilized, 2 samples each 10 ml

► **Analytes**

From a list of 30 substances ([www.rfb.bio/cgi/anaLists/SX/en](http://www.rfb.bio/cgi/anaLists/SX/en)), the proof of 6 - 8 substances with chromatographic methods is required in both samples.

## ToxoGimm - Anti-Toxoplasma-gondii

Survey	Application deadline	Sample dispatch date	survey period from	to
ToxoGimm1/23	17.04.23	24.05.23	29.05.23	10.06.23
ToxoGimm2/23	17.07.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-Toxoplasma-gondii IgG

Anti-Toxoplasma-gondii IgM

Anti-Toxoplasma-gondii total

## TrepPimm - Anti-Treponema pallidum

Survey	Application deadline	Sample dispatch date	survey period from	to
TrepPimm1/23	17.04.23	24.05.23	29.05.23	10.06.23
TrepPimm2/23	17.07.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

Anti-Treponema pallidum IgG

Anti-Treponema pallidum IgM

Anti-Treponema pallidum total

## TX - Toxicologic analyses

Survey	Application deadline	Sample dispatch date	survey period from	to
TX1/23	09.01.23	08.02.23	13.02.23	25.02.23
TX2/23	19.06.23	19.07.23	24.07.23	05.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

urine, lyophilized  
serum, lyophilized

2 samples 5 ml  
1 sample 5 ml

► **Analytes**

qualitative search for foreign substances in urine/serum

► **Information**

The samples contain one or more pharmaceutical drugs or toxic agents. Together with a patient history the substances found should be interpreted. In general the use of chromatographic methods is essential to succeed in this survey.

## US - Urine sediment

Survey	Application deadline	Dispatch date of instruction	survey period from	to
US1/23	06.03.23	15.03.23	20.03.23	15.04.23
US2/23	11.09.23	20.09.23	25.09.23	21.10.23

€ Fee for each survey, net prices plus VAT

► **Sample material**

web-based, virtual microscopy of two urine sediments

► **Analytes**

Qualitative and semi-quantitative determinations  
Morphology

## VariAimm - Various immunological analytes

Survey	Application deadline	Sample dispatch date	survey period from	to
VariAimm1/23	17.04.23	24.05.23	29.05.23	10.06.23
VariAimm2/23	17.07.23	20.09.23	25.09.23	07.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 liquid samples of defibrinated plasma or serum

► **Analytes**

set 1: Anti-Echinococcus IgG  
set 2: Anti-Entamoeba histolytica IgG  
set 3: Anti-Plasmodium total  
set 4: Anti-Schistosoma IgG  
set 5: Anti-Candida albicans IgG  
set 6: Anti-Streptokokken-Desoxyribonuklease IgG

## ZZ - Cerebrospinal fluid cytology

Survey	Application deadline	Dispatch date of instruction	survey period from	to
ZZ1/23	01.05.23	10.05.23	15.05.23	27.05.23
ZZ2/23	11.09.23	20.09.23	25.09.23	07.10.23

€ Fee for each survey, net prices plus VAT

► **Sample material**

web-based assessment of cytopsin preparation with clinical case history, 2 samples

► **Analytes**

Both preparations are to be assessed for morphology and diagnosis

## Direct detection of pathogens

### BA - Bacteriology Major

Survey	Application deadline	Sample dispatch date	survey period from	to
BA1/23	13.02.23	10.05.23	15.05.23	27.05.23
BA2/23	10.07.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

Iyophilized control samples, 5 strains (samples A to E)

► **Investigation target**

identification and resistance testing

### BakNAT1 - Genome evidence group 1

Survey	Application deadline	Sample dispatch date	survey period from	to
BakNAT11/23	20.03.23	10.05.23	15.05.23	27.05.23
BakNAT12/23	28.08.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

Iyophilized DNA, 4 samples

► **Analytes**

set 1: Bordetella pertussis  
set 2: Chlamydia pneumoniae  
set 3: Mycoplasma pneumoniae  
set 4: Coxiella burnetii  
set 5: Francisella tularensis  
set 6: Legionella pneumophila  
set 7: MRSA

### BakNAT2 - Genome evidence group 2

Survey	Application deadline	Sample dispatch date	survey period from	to
BakNAT21/23	20.03.23	10.05.23	15.05.23	27.05.23
BakNAT22/23	28.08.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

Iyophilized DNA, 4 samples

► **Analytes**

set 1: Salmonella enterica  
set 2: EHEC/STEC  
set 3: Helicobacter pylori  
set 4: Listeria monocytogenes  
set 5: Borrelia burgdorferi

## BakNAT3 - Genome evidence group 3

Survey	Application deadline	Sample dispatch date	survey period from	to
BakNAT31/23	20.03.23	10.05.23	15.05.23	27.05.23
BakNAT32/23	28.08.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

lyophilized DNA, 4 samples

► **Analytes**

set 1: Chlamydia trachomatis

set 2: Neisseria gonorrhoeae

## BAK-TK - Proficiency panel to detect bacteria in platelet concentrates

Survey	Application deadline	Sample dispatch date	survey period from	to
BAK-TK1/23 Set 1	20.03.23	19.04.23	20.04.23	21.04.23
BAK-TK1/23 Set 2 + 3	20.03.23	19.04.23	20.04.23	03.05.23
BAK-TK2/23 Set 1	09.10.23	08.11.23	09.11.23	10.11.23
BAK-TK2/23 Set 2 + 3	09.10.23	08.11.23	09.11.23	22.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

set 1: 6 samples of platelet concentrates

set 2 + 3: 6 samples of platelet concentrates

► **Investigation target**

set 1: Detection with rapid methods

set 2: Detection with culture methods

set 3: Identification of bacteria

► **Information**

**Set 3 can only be ordered in conjunction with set 2.**

**Due to German postal regulations for infectious material these surveys cannot be delivered to participants outside Germany.**

## BM - Bacteriology Minor

Survey	Application deadline	Sample dispatch date	survey period from	to
BM1/23	13.02.23	09.05.23	15.05.23	27.05.23
BM2/23	10.07.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

lyophilized control samples, 3 strains (samples A to C)

► **Investigation target**

identification and resistance testing

## B-Stscre - B-Streptococci screening

Survey	Application deadline	Sample dispatch date	survey period from	to
B-Stscre1/23	30.01.23	22.03.23	27.03.23	08.04.23
B-Stscre2/23	14.08.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, gel smear tubes

► **Analytes**

B-Streptococci screening for cultural evidence and NAT-methods

## CdToxin - Clostridium (Clostridioides) difficile toxin genome

Survey	Application deadline	Sample dispatch date	survey period from	to
CdToxin1/23	30.01.23	22.03.23	27.03.23	08.04.23
CdToxin2/23	14.08.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 lyophilized control samples

► **Analyte**

Clostridium (Clostridioides) difficile toxin genome

## ChlamTra - Chlamydia trachomatis AG

Survey	Application deadline	Sample dispatch date	survey period from	to
ChlamTra1/23	20.03.23	10.05.23	15.05.23	27.05.23
ChlamTra2/23	28.08.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

urine, 4 samples, each 0,5 ml

► **Analyte**

Chlamydia trachomatis antigen

## CoVag - Evidence of SARS-CoV-2 antigen

Survey	Application deadline	Sample dispatch date	survey period from	to
CoVag1/23	09.01.23	08.03.23	13.03.23	25.03.23
CoVag2/23	19.06.23	23.08.23	28.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, inactive virus in 1ml cell culture supernatant

► **Analyte**

SARS-CoV-2 antigen

## CoVpcr - Genome evidence of SARS-CoV-2 and variants of concern

Survey	Application deadline	Sample dispatch date	survey period from	to
CoVpcr1/23	09.01.23	08.03.23	13.03.23	25.03.23
CoVpcr2/23	19.06.23	23.08.23	28.08.23	09.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, inactive virus in 1ml cell culture supernatant

► **Analyte**

Qualitative evidence of SARS-CoV-2 genome

Determination of the variants

## CrypCand - Cryptococcus neoformans and candida albicans antigen

Survey	Application deadline	Sample dispatch date	survey period from	to
CrypCand1/23	16.01.23	22.02.23	27.02.23	11.03.23
CrypCand2/23	17.07.23	23.08.23	29.08.23	10.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

serum, 4 samples, each 0,5 ml

► **Analytics**

Cryptococcus neoformans and Candida albicans antigen

## GP - Gram-staining

Survey	Application deadline	Sample dispatch date	survey period from	to
GP1/23	<b>19.12.22</b>	22.02.23	27.02.23	11.03.23
GP2/23	12.06.23	16.08.23	21.08.23	02.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

2 fixed unstained smears

► **Examination**

Judgement of staining and morphology

## HEVpcr - Hepatitis E virus

Survey	Application deadline	Sample dispatch date	survey period from	to
HEVpcr1/23	<b>05.12.22</b>	08.02.23	13.02.23	25.02.23
HEVpcr2/23	29.05.23	02.08.23	07.08.23	19.08.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

human plasma, 4 samples (liquid ready to use)

► **Analyte**

HEV-RNA

## Infl-RSV - Influenza and RSV antigen evidence

Survey	Application deadline	Sample dispatch date	survey period from	to
Infl-RSV1/23	20.02.23	26.04.23	01.05.23	13.05.23
Infl-RSV2/23	14.08.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

NaCl-matrix, 4 samples, each 1 ml

► **Analytes**

set 1: Influenza Ag  
set 2: RSV Ag

## MMRpcr - Genome evidence measles, mumps, rubella

Survey	Application deadline	Sample dispatch date	survey period from	to
MMRpcr1/23	23.01.23	29.03.23	03.04.23	15.04.23
MMRpcr2/23	31.07.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, virus material in plasma

► **Analytes**

Set 1: Measels virus

Set 2: Mumps virus

Set 3: Rubella virus

## MRGNscre - MRGN Screening

Survey	Application deadline	Sample dispatch date	survey period from	to
MRGNscre1/23	30.01.23	22.03.23	27.03.23	08.04.23
MRGNscre2/23	14.08.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, gel smear tubes

► **Analytes**

Culture proof of MRGN

Molecular diagnostic proof of Carbapenemases

## MRSAscre - MRSA Screening

Survey	Application deadline	Sample dispatch date	survey period from	to
MRSAscre1/23	20.03.23	10.05.23	15.05.23	27.05.23
MRSAscre2/23	28.08.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 eSwab tubes, 1 ml

► **Analytes**

MRSA Screening for cultural evidence and NAT-methods

Detection Panton-Valentine leucocidin (PVL)

## MykCult - Cultivation and identification of fungi

Survey	Application deadline	Sample dispatch date	survey period from	to
MykCult1/23	20.03.23	10.05.23	15.05.23	03.06.23
MykCult2/23	28.08.23	18.10.23	23.10.23	11.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, gel smear tubes

► **Analytes**

Cultivation and identification of fungi

## MykIdent - Identification of fungi

Survey	Application deadline	Dispatch date of instruction	survey period from	to
MykIdent1/23	20.02.23	22.03.23	27.03.23	08.04.23
MykIdent2/23	04.09.23	04.10.23	09.10.23	21.10.23

€ Fee for each survey, net prices plus VAT

► **Sample material**

virtual microscopy of 2 preparations

► **Analytes**

Identification of fungi

## NoroPCR - Norovirus PCR

Survey	Application deadline	Sample dispatch date	survey period from	to
NoroPCR1/23	23.01.23	29.03.23	03.04.23	15.04.23
NoroPCR2/23	31.07.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

NaCl-matrix, liquid, 4 samples

► **Analyte**

Norovirus RNA

## ParasitB - Parasites in blood

Survey	Application deadline	Dispatch date of instruction	survey period from	to
ParasitB1/23	27.03.23	26.04.23	01.05.23	13.05.23
ParasitB2/23	18.09.23	18.10.23	23.10.23	04.11.23

€ Fee for each survey, net prices plus VAT

► **Sample material**

virtual microscopy, one or more visual fields of 2 preparations

► **Analytes**

Parasites in blood

## ParasitS - Parasites in stool

Survey	Application deadline	Dispatch date of instruction	survey period from	to
ParasitS1/23	27.03.23	26.04.23	01.05.23	13.05.23
ParasitS2/23	18.09.23	18.10.23	23.10.23	04.11.23

€ Fee for each survey, net prices plus VAT

► **Sample material**

virtual microscopy, one or more visual fields of 2 preparations

► **Analytes**

Parasites in stool

## PolyVir1 - Genome evidence group 1

Survey	Application deadline	Sample dispatch date	survey period from	to
PolyVir11/23	06.03.23	09.05.23	15.05.23	27.05.23
PolyVir12/23	14.08.23	17.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples of liquid EDTA plasma, each 4 ml

► **Analytes**

set 1: HAV-RNA qualitative  
 set 2: HBV-DNA qualitative and quantitative  
 set 3: HCV-RNA qualitative and quantitative  
 set 4: HIV-1-RNA qualitative and quantitative

set 5: HIV-2-RNA qualitative  
 set 6: WNV-RNA qualitative  
 set 7: CMV-DNA qualitative and quantitative  
 set 8: pvB19-DNA qualitative

## PolyVir2 - Genome evidence group 2

Survey	Application deadline	Sample dispatch date	survey period from	to
PolyVir21/23	20.02.23	25.04.23	01.05.23	13.05.23
PolyVir22/23	31.07.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, each 1 ml virus-DNA on NaCl-Matrix

► **Analytes**

set 1: Adenoviren  
 set 2: Enteroviren  
 set 3: EBV

set 4: HSV1/2  
 set 5: HPV  
 set 6: Influenza A/B

set 7: RSV  
 set 8: VZV

## ToxoGen - Toxoplasma Gondii Genome

Survey	Application deadline	Sample dispatch date	survey period from	to
ToxoGen1/23	20.03.23	10.05.23	15.05.23	27.05.23
ToxoGen2/23	28.08.23	18.10.23	23.10.23	04.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

Iyophilized DNA, 4 samples

► **Analytes**

Toxoplasma Gondii Genome

## TubDiag - Tuberculosis diagnostic

Survey	Application deadline	Sample dispatch date	survey period from	to
TubDiag1/23 Set 1 + 4	16.01.23	21.03.23	23.03.23	07.04.23
TubDiag1/23 Set 2	16.01.23	21.03.23	23.03.23	02.06.23
TubDiag1/23 Set 3 + 5	16.01.23	21.03.23	23.03.23	12.05.23
TubDiag1/23 Set 6	16.01.23	21.03.23	23.03.23	28.04.23
TubDiag2/23 Set 1 + 4	10.07.23	12.09.23	14.09.23	29.09.23
TubDiag2/23 Set 2	10.07.23	12.09.23	14.09.23	24.11.23
TubDiag2/23 Set 3 + 5	10.07.23	12.09.23	14.09.23	03.11.23
TubDiag2/23 Set 6	10.07.23	12.09.23	14.09.23	20.10.23

This survey is organized in co-operation with Instand e. V..

€ Fee for each survey, net prices plus VAT, plus special freight

► **Investigation target**

- set 1: Microscopy detection of acid-fast bacilli (Instand program 421).
- set 2: Detection of mycobacteria by culture and differentiation between TB and NTM (Instand program 422).
- set 3: Identification of mycobacteria (Instand program 423).
- set 4: Detection of tubercle-bacilli by NAT (Instand program 424).
- set 5: Drug susceptibility (Instand program 425).
- set 6: Molecular drug susceptibility (Instand program 426).

► **Sample material**

- set 1: 6 microscopy slides
- set 2: 5 sputum specimens
- set 3: 5 suspensions of mycobacterial strains
- set 4: 5 sputum specimens
- set 5: 5 suspensions of M. tuberculosis complex strains for phenotypic resistance testing
- set 6: 5 suspensions of M. tuberculosis complex strains for molecular resistance testing

► **Information**

**For deliveries additional freight charges will be invoiced.**

This survey is not subject of the accredited area of the RfB.

The surveys are performed in a cooperation with Instand e.V. This dispatch of the samples and the evaluation is done by Instand e.V.

## VREscre - VRE Screening

Survey	Application deadline	Sample dispatch date	survey period from	to
VREscre1/23	30.01.23	22.03.23	27.03.23	08.04.23
VREscre2/23	14.08.23	04.10.23	09.10.23	21.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

4 samples, gel smear tubes

► **Analytes**

Cultural proof of VRE

Molecular diagnostic proof of Van A / Van B

## Ejaculate investigation

### EJ - Semen analysis

Survey	Application deadline	Sample dispatch date	survey period from	to
EJ1/23	27.02.23	20.03.23	22.03.23	20.04.23
EJ2/23	02.10.23	16.10.23	18.10.23	16.11.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

Washed and fixed sperm preparation

► **Analyte**

Estimation of sperm concentration and the assessment of morphologically normal forms. Additionally the online analysis of sperm motility is possible.

► **Information**

The surveys are performed in a cooperation with the German society of andrology and their quality control organization QuaDeGa. The dispatch of the samples and the evaluation is done by QuaDeGa. This survey is not subject of the accredited area of the RfB.

## Molecular- and cytogenetic investigations

### ctDNA - circulating tumor DNA

Survey	Application deadline	Sample dispatch date	survey period from	to
ctDNA1/23	16.01.23	28.03.23	03.04.23	29.04.23
ctDNA2/23	17.07.23	26.09.23	02.10.23	28.10.23

€ Net prices plus VAT (Standard shipping within Germany included)

For multiple orders of your chosen set collection you can also use the application form 7

#### ► Sample material

EDTA-plasma, 3 samples each 3 ml

#### ► Analyte

- set A: KRAS proto-oncogene, GTPase (KRAS)
  - KRAS p.G12 (KRAS, LRG\_344p1:p.Gly12Cys/Arg/Ser, rs121913530)
  - KRAS p.G12 (KRAS, LRG\_344p1:p.Gly12Val/Ala/Asp, rs121913529)
  - KRAS p.G13 (KRAS, LRG\_344p1:p.Gly13Cys/Arg/Ser, rs121913535)
  - KRAS p.G13 (KRAS, LRG\_344p1:p.Gly13Val/Ala/Asp, rs112445441)
- set B: BRAF proto-oncogene, serine/threonine kinase (BRA)
  - BRAF p.V600E (BRAF, LRG\_299p1:p.Val600Glu, rs113488022)
- set C: Epidermal growth factor receptor (EGFR)
  - EGFR p.T790M (EGFR, LRG\_304t1:c.2369C>T, rs121434569)
- set D: NRAS proto-oncogene, GTPase (NRAS)
  - NRAS p.Q61 (NRAS, LRG\_92p1:p.Gln61Ter/Glu/Lys, rs121913254)
  - NRAS p.Q61 (NRAS, LRG\_92p1:p.Gln61Leu/Arg/Pro, rs11554290)
  - NRAS p.Q61 (NRAS, LRG\_92p1:p.Gln61His, rs121913255)

#### ► Information

This survey is only available for european participants because of lacking sample stability with expanded shipment period.

For ordering be aware of the different sets A, B, C and D.

For certification, you have to report the concentration and the identification of the determined genotypes.

This survey is not subject of the accredited area of the RfB.

### DI - DNA isolation

Survey	Application deadline	Sample dispatch date	survey period from	to
DI1/23	09.01.23	08.03.23	13.03.23	08.04.23
DI2/23	19.06.23	23.08.23	28.08.23	23.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

#### ► Sample material

full blood, K-EDTA, 2 samples each 500 µl

#### ► Analyte

- |               |  |
|---------------|--|
| DNA isolation | <ul style="list-style-type: none"> <li>- FV-Leiden (F5, LRG_553p1:p.Arg534Gln, rs6025)</li> <li>- FV-H1299R (F5, LRG_553p1:p.His1327Arg, rs1800595)</li> <li>- FV-Cambridge (F5, LRG_553p1:p.Arg334Thr, rs118203906)</li> <li>- FV-Hong-Kong (F5, LRG_553p1:p.Arg334Gly, rs118203905)</li> <li>- FII g20210a (F2, LRG_551t1:c.*97G&gt;A, rs1799963)</li> </ul> |
|---------------|--|

DNA isolation	Methylenetetrahydrofolate reductase (MTHFR - MTHFR C677T (MTHFR, LRG_726p1:p.Ala222Val, rs1801133) - MTHFR A1298C (MTHFR, LRG_726p1:p.Glu429Ala, rs1801131) Hereditäre Hämochromatose (HFE) - HFE H63D (HFE, LRG_748p1:p.His63Asp, rs1799945) - HFE C282Y (HFE, LRG_748p1:p.Cys282Tyr, rs1800562) - HFE S65C (HFE, LRG_748p1:p.Ser65Cys, rs1800730)
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#### ► Information

Methodological survey:  
determination of concentration of DNA  
ratio 260/280  
method of identification  
defined genotypes

### MG1 - Molecular genetics group 1

Survey	Application deadline	Sample dispatch date	survey period from	to
MG11/23	09.01.23	08.03.23	13.03.23	01.04.23
MG12/23	19.06.23	23.08.23	28.08.23	16.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

For multiple orders of your chosen set collection you can also use the application form 7

#### ► Sample material

DNA preparation, lyophilized, 2 samples each 800 ng

#### ► Analytes

- set A: - FV-Leiden (F5, LRG\_553p1:p.Arg534Gln, rs6025)  
- FII g20210a, (F2, LRG\_551t1:c.\*97G>A, rs1799963)  
Methylenetetrahydrofolate reductase (MTHFR)  
- MTHFR C677T (MTHFR, LRG\_726p1:p.Ala222Val, rs1801133)  
- MTHFR A1298C (MTHFR, LRG\_726p1:p.Glu429Ala, rs1801131)  
- PAI-I 4G5G (SERPINE1, LRG\_597t1:c.-820\_-817G(4\_5), rs1799762)
- set B: - FXIII V34L (F13A1, LRG\_549p1:p.Val35Leu, rs5985)  
- GPIIIa (ITGB3, LRG\_481p1:p.Leu59Pro, rs5918)  
- beta-Fibrinogen g-455a (FGB, NM\_005141.4:c.-463G>A, rs1800790)  
Vitamin K epoxide reductase complex subunit 1 (VKORC1)  
- VKORC1 G-1639 (VKORC1, LRG\_582:g.3588G>T, rs9923231)  
- VKORC1 C1173T (VKORC1, LRG\_582t1:c.174-136C>T, rs9934438)  
- FXII c46t (F12, LRG\_145t1:c.-4T>C, rs1801020)  
- FV-H1299R (F5, LRG\_553p1:p.His1327Arg, rs1800595)
- set C: Alpha-1-Antitrypsin, (serpin family A member1)  
- AAT-PI\*S (SERPINA1, LRG\_575p1:p.Glu288Val, rs17580)  
- AAT-PI\*Z (SERPINA1, LRG\_575p1:p.Glu366Lys, rs28929474)  
Apolipoprotein E (APOE)  
- ApoE2 (APOE, NP\_000032.1:p.Arg176Cys, rs7412)  
- ApoE4 (APOE, NP\_000032.1:p.Cys130Arg, rs429358)  
- ApoB100 (APOB, NP\_000375.3:p.Arg3527Gln, rs5742904)  
- ACE I/D (ACE, NM\_000789.3:c.2306-117\_2306-116insAF118569.1:g.14094\_14382, rs1799752)  
- CETP B1/B2 (CETP, NM\_000078.3:c.118+279G>A, rs708272)
- set D: Aldolase, fructose-bisphosphate B (ALDOB )  
- AldoB 149 (ALDOB, LRG\_1244p1:p.Ala150Pro, rs1800546)  
- AldoB 174 (ALDOB, LRG\_1244p1:p.Ala175Asp, rs76917243)  
- AldoB 334 (ALDOB, LRG\_1244p1:p.Asn335Lys, rs78340951)

- set D: Hereditäre Hämochromatose (HFE)  
 - HFE H63D (HFE, LRG\_748p1:p.His63Asp, rs1799945)  
 - HFE C282Y (HFE, LRG\_748p1:p.Cys282Tyr, rs1800562)  
 - HFE S65C (HFE, LRG\_748p1:p.Ser65Cys, rs1800730)  
 - LCT c-13910t (LCT, LRG\_338t1:c.-13907C>T, rs4988235)  
 Nucleotide binding oligomerization domain containing 2 (NOD2)  
 - NOD R702W (NOD2, LRG\_177p1:p.Arg702Trp, rs2066844)  
 - NOD G908R (NOD2, LRG\_177p1:p.Gly908Arg, rs2066845)  
 - NOD L1007finsC (NOD2, LRG\_177p1:p.Leu1007fs, rs2066847)
- set E: - ATP7B-C3207A (ATP7B, NP\_000044.2:p.His1069Gln, rs76151636)  
 - FSAP Marburg-I (HABP2, NP\_004123.1:p.Gly534Glu, rs7080536)  
 - ITGA2 Gplalla C807T (ITGA2, LRG\_1001p1:p.Phe253=, rs1126643)  
 - Col1A1 SP1 (Col1A1, NM\_000088.4:c.104-441G>T, rs1800012)  
 Vitamin D receptor (VDR)  
 - VDR BsmI (VDR, NM\_000376.3:c.1024+283G>A, rs1544410)  
 - VDR Apal (VDR, NM\_000376.3:c.1025-49G>T, rs7975232)  
 - VDR TaqI (VDR, NP\_000367.1:p.Ile352=, rs731236)
- set F: - Faktor VII (R353Q) (F7, LRG\_554p1:p.Arg413Gln, rs6046)  
 - AT3 Cambridge Typ I/II (SERPINC1, LRG\_577p1:p.Ala416Pro/Ser, rs121909548)  
 - CYP3A5\*3 (CYP3A5, NM\_000777.5:c.219-237A>G, rs776746)

#### ► Information 1

Please take into account the division into sets A, B, C, D, E, F when you order this survey (see application form). Please mark the sets needed on that form.

## MG2 - Molecular genetics group 2

Survey	Application deadline	Sample dispatch date	survey period from	to
MG21/23	09.01.23	08.03.23	13.03.23	01.04.23
MG22/23	19.06.23	23.08.23	28.08.23	16.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

For multiple orders of your chosen set collection you can also use the application form 7

#### ► Sample material

DNA preparation, lyophilized, 2 samples each 800 ng (set D: 4000 ng)

#### ► Analytes

- set A: Thiopurine S-methyltransferase (TPMT)  
 - TPMT\*2 (TPMT, LRG\_874p1:p.Ala80Pro, rs1800462)  
 - TPMT\*3B (TPMT, LRG\_874p1:p.Ala154Thr, rs1800460)  
 - TPMT\*3C (TPMT, LRG\_874p1:p.Tyr240Cys, rs1142345)  
 - CYP2C8\*3 (CYP2C8, NP\_000761.3:p.Lys399Arg, rs10509681)  
 Cytochrome P450 2C9 (CYP2C9)  
 - CYP2C9\*2 (CYP2C9, LRG\_1195p1:p.Arg144Cys, rs1799853)  
 - CYP2C9\*3 (CYP2C9, LRG\_1195p1:p.Ile359Leu, rs1057910)  
 - UGT1A1\*28 (UGT1A1, LRG\_733t1:c.-41\_-40dup, rs3064744)  
 Dihydropyrimidine dehydrogenase (DPYD)  
 - DPYD\*2A (DPYD, LRG\_722t1:c.1905+1G>A, rs3918290)  
 - DPYD\*13 (DPYD, LRG\_722p1:p.Ile560Ser, rs55886062)  
 - DPYD p.D949V (DPYD, LRG\_722p1:p.Asp949Val, rs67376798)  
 - DPYD c.1129-5923C>G (DPYD, LRG\_722:g.346167C>G, rs75017182)  
 - DPYD c.1236G>A (DPYD, LRG\_722p1:p.Glu412=, rs56038477)  
 - DPYD HapB3 (DPYD, LRG\_722:g.346167C>G, rs75017182 or DPYD, LRG\_722p1:p.Glu412=, rs56038477)  
 - DPD activity score acc. to CPIC  
 - BCHE A (D70G) (BCHE, NP\_000046.1:p.Asp98Gly, rs1799807)  
 - BCHE K (A567T) (BCHE, NP\_000046.1:p.Ala567Thr, rs1803274)

- set B: KRAS proto-oncogene, GTPase (KRAS)
- KRAS p.G12 (KRAS, LRG\_344p1:p.Gly12Cys/Arg/Ser, rs121913530)
  - KRAS p.G12 (KRAS, LRG\_344p1:p.Gly12Val/Ala/Asp, rs121913529)
  - KRAS p.G13 (KRAS, LRG\_344p1:p.Gly13Cys/Arg/Ser, rs121913535)
  - KRAS p.G13 (KRAS, LRG\_344p1:p.Gly13Val/Ala/Asp, rs112445441)
  - KRAS p.Q61 (KRAS, LRG\_344p1:p.Gln61Glu/Lys, rs121913238)
  - KRAS p.Q61 (KRAS, LRG\_344p1:p.Gln61Leu/Arg/Pro, rs121913240)
  - KRAS p.Q61 (KRAS, LRG\_344p1:p.Gln61His, rs17851045)
  - BRAF proto-oncogene, serine/threonine kinase (BRAF)
  - BRAF p.V600E (BRAF, LRG\_299p1:p.Val600Glu, rs113488022)
  - BRAF p.V600K (BRAF, LRG\_299p1:p.Val600Lys, rs121913227)
  - cKIT p.D816V (KIT, LRG\_307p1:p.Asp816Val, rs121913507)
  - NRAS proto-oncogene, GTPase (NRAS)
  - NRAS p.Q61 (NRAS, LRG\_92p1:p.Gln61Ter/Glu/Lys, rs121913254)
  - NRAS p.Q61 (NRAS, LRG\_92p1:p.Gln61Leu/Arg/Pro, rs11554290)
  - NRAS p.Q61 (NRAS, LRG\_92p1:p.Gln61His, rs121913255)
- set C: - HLA-B\*27 (HLA-B, NM\_005514.8)
- TNF alpha 238 (TNF, NM\_000594.3:c.-418G>A, rs361525)
  - TNF alpha 308 (TNF, NM\_000594.3:c.-488G>A, rs1800629)
- set D: Cytochrom P450 2D6 (CYP2D6)
- CYP2D6\*2-296 (CYP2D6, LRG\_303p1:p.Arg296Cys, rs16947)
  - CYP2D6\*2-486 (CYP2D6, LRG\_303p1:p.Ser486Thr, rs1135840)
  - CYP2D6\*3 (CYP2D6, LRG\_303p1:p.Arg259fs, rs35742686)
  - CYP2D6\*4 (CYP2D6, LRG\_303t1:c.506-1G>A, rs3892097)
  - CYP2D6\*6 (CYP2D6, LRG\_303p1:p.Trp152fs, rs5030655)
  - CYP2D6\*7 (CYP2D6, LRG\_303p1:p.His324Pro, rs5030867)
  - CYP2D6\*8 (CYP2D6, LRG\_303p1:p.Gly169Ter, rs5030865)
  - CYP2D6\*9 (CYP2D6, LRG\_303p1:p.Lys281del, rs5030656)
  - CYP2D6\*10 (CYP2D6, LRG\_303p1:p.Pro34Ser, rs1065852)
  - CYP2D6\*17 (CYP2D6, LRG\_303p1:p.Thr107Ile, rs28371706)
  - CYP2D6\*35 (CYP2D6, LRG\_303p1:p.Val11Met, rs769258)
  - CYP2D6\*41 (CYP2D6, LRG\_303t1:c.985+39G>A, rs28371725)
  - CYP2D6\*5 (CYP2D6, Deletion)
  - CYP2D6\*xN (CYP2D6, Duplikation/Amplifikation)
  - Cytochrom P450 2C19 (CYP2C19)
  - CYP2C19\*2 (CYP2C19, NP\_000760.1:p.Pro227=, rs4244285)
  - CYP2C19\*3 (CYP2C19, NP\_000760.1:p.Trp212Ter, rs4986893)
  - CYP2C19\*17 (CYP2C19, NG\_008384.3:g.4220C>T, rs12248560)
- set E: - HLA B\*57:01 (HLA-B, NM\_005514.8)
- Cytochrom P450 2B6 (CYP2B6)
  - CYP2B6\*4 (CYP2B6, LRG\_1267p1:p.Lys262Arg, rs2279343)
  - CYP2B6\*9 (CYP2B6, LRG\_1267p1:p.Gln172His, rs3745274)
  - CYP2B6\*6 (CYP2B6, LRG\_1267p1:p.[Lys262Arg, Gln172His], rs2279343 und rs3745274)
  - ABCB1 c.3435C>T (ABCB1, NP\_001335875.1:p.Ile1145=, rs1045642)
  - CCR5-del32bp (CCR5, NP\_001381712.1:p.Ser185fs, rs333)
- set F: - IL28B (C/T Polymorphismus) (IFNL4, NM\_001276254.2:c.151-152G>A, rs12979860)
- IL6 G(-174)C (IL6, NG\_011640.1:g.4880C>G, rs1800795)
  - CYP3A4\*22 (CYP3A4, NM\_017460.6:c.522-191C>T, rs35599367)

## ► Information 1

Please take into account the division into sets A, B, C, D, E, F when you order this survey (see application form). Please mark the sets needed on that form.

## ► Information 2

The following analytes are offered by our cooperation-partner European Molecular Genetics Quality Network (EMQN). More information: [www.rfb.bio/pdf/EMQN.pdf](http://www.rfb.bio/pdf/EMQN.pdf)

- Hereditary hemochromatosis (genotyping and interpretation)
- Cystic fibrosis, mucoviscidosis
- Familial breast-/ovarian- cancer (BRCA)
- Hereditary nonpolyposis colon cancer
- 21-hydroxylase deficiency (Congenital adrenal hyperplasia)
- Huntington s disease
- Duchenne and Becker muscular dystrophy
- Prader-Willi and Angelman syndromes
- Fragile X Syndrome
- Spinal Muscular Atrophy
- Hereditary auditory disorder
- Y chromosome microdeletions

## SQ - DNA Sequencing

Survey	Application deadline	Sample dispatch date	survey period from	to
SQ1/23	09.01.23	08.03.23	13.03.23	08.04.23
SQ2/23	19.06.23	23.08.23	28.08.23	23.09.23

€ Net prices plus VAT (Standard shipping within Germany included)

► **Sample material**

DNA-preparation, lyophilized, 2 samples (PCR product + Primer for/rev)

► **Analytes**

DNA sequencing

► **Information**

This survey is not subject of the accredited area of the RfB.

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**Responsible body of the Reference Institute for Bioanalytics (RfB) is the Foundation for Pathobiochemistry and Molecular Diagnostics**

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## Data protection declaration

No matter whether you are a participant in a survey, a prospective customer or are simply visiting our website: we respect and protect your private sphere. In accordance with Art. 13 of the EU General Data Protection Regulation (EU-GDPR), we hereby inform you of the means by which we collect, process and use your personal data. At the same time, we especially focus on transparent use of your data by the RfB that's fair for you. The following provides you with an overview of what personal data we collect from you and what we do with it. We also inform you of your rights according to data protection legislation in effect and let you know who you can consult if you have any further questions.

### Who are we?

The Reference Institute for Bioanalytics (Referenzinstitut für Bioanalytik or RfB for short) is one of two survey organisations which is officially commissioned by the German Medical Association to conduct surveys for external quality control.

Responsible party as per EU-GDPR

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Foundation directory Karlsruhe - Ref. no.: 14-0563.1

Authorised representative: Dr. Anja Kessler - datenschutzbeauftragter@spmd-rfb.de

### How your data is processed

#### What personal data do we collect from you?

We collect your personal data if you have registered for the surveys in written form or if you contact us through the various communication channels. We process the following specific data: Name, E-mail address, company address.

If you are a participant: Participant number, password, delivery address, certificate address, billing address, telephone number and, if necessary, E-mail address, bank connection, survey results and all related documents. IT usage data (IP address, date and time of connection).

#### Where does this data come from?

You yourself provide us with this information when you sign up to use our services. If you are a participant: from your written registration, from a message from you via E-mail, fax or telephone, from messages over our website or, if we are missing important communication information, from internet research as well. In some cases, we also obtain your contact information from external cooperation partners. When our internet services are used, pseudonymised usage data in the form of IP addresses is collected.

#### What do we use this data for and what are the legal bases for doing so?

Fulfilment of contractual relationships (Art. 6 Para. 1b EU-GDPR): As a general rule, you are engaging in a business relationship with us (an ongoing contract) or the data processing is necessary at your request to conduct pre-contractual measures, such as: For the fulfilment of contractual relationships, such as surveys ordered, as well as to bill for services received: To fulfil your requests and improve our offerings based on a balancing of interests (Art. 6 Para. 1f EU-GDPR): To ensure orderly operation and to optimise our offerings: We monitor the use of our services in order to ensure capacity and IT security. This is done based on IP addresses. We do not attempt to allocate the IP addresses used to your user account. Due to statutory requirements (Art. 6 Para. 1c EU-GDPR): As a special-purpose enterprise of the Foundation for Pathobiochemistry and Molecular Diagnostics, we are subject to numerous provisions of fiscal and commercial legislation. We must process and store your data in order to comply with these provisions.

Based on your consent (Art. 6 Para. 1a EU-GDPR): In some cases, you have granted us your consent to process your data. You may revoke this consent at any time. This also applies to declarations of consent which you have granted us before the EU-GDPR entered into effect, i.e. before 25 May 2018.

#### How long will we store your data for?

Different periods of time apply to the storage duration of your data: Tax-related data will, as a rule, be stored for 10 years Commerce-related data will, as a rule, be stored for 6 years Usage data such as connection history (pseudonymised by IP address): 1 year

#### Will we transfer your data to a third party?

Data collection companies have been commissioned to record your survey results which we receive in hard copy (fax or letter). All persons involved are obliged to comply strictly with all relevant data protection requirements.

#### External service providers

We work with a host of external service providers who support us in providing our services. We have chosen all of our service providers carefully and contractually obligated them to comply diligently with all relevant data protection requirements. At the same time, we only transfer the minimum amount of data necessary to use these services as a matter of course.

#### Transfer to other survey organisers

If you have registered with us for a survey which is being conducted by one of our cooperation partners (such as TH thrombophilia screening at ECAT), we will transfer all of the data relevant to the performance of the survey to the cooperation partner.

#### What other rights do you have?

Right to information, correction, deletion and restriction In accordance with Articles 14-17 of the EU-GDPR, we hereby inform you that you have the right to information, correction, deletion or restriction of the processing of your data.

#### Right to revocation

If you have granted your consent to the data processing, you may revoke this at any time without affecting the legality of the processing which had already taken place based on the consent until it was revoked.

#### Right to file a complaint

You have the right to file a complaint with a competent supervisory authority at any time.

#### Use of cookies

Cookies are small text files which are sent to your computer when our website is used. We use cookies for the exclusive purpose of enabling special user functions (so-called "session cookies"). For that reason, it may be the case that you will not be able to use our website as intended without cookies. However, we do not use cookies in order to create user profiles.

Most internet browsers are set to accept cookies automatically. However, you can deactivate the saving of cookies or set your browser to notify you as soon as cookies are sent. You can use your internet browser's help function to do so.

#### Further information

Should you have any further questions or suggestions, we will be glad to assist you at any time.



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## Reference Institute for Bioanalytics

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