



Verein für medizinische Qualitätskontrolle
Association pour le contrôle de Qualité médical
Associazione per il controllo di qualità medico

Instructions and patient details survey 2025-3

General information

A list of all analyses with the corresponding samples can be found on www.MQZH.ch under «Offer».

Sample handling

Unless otherwise stated, our proficiency test samples can be used as patient material. Refrigerated samples must be removed from the refrigerator about 15-30 minutes (exception blood gas ampoules 5 hrs) before analysis to equilibrate them at room temperature. Ready-to-use samples only need to be mixed afterwards. Our samples are partly of human origin and are handled and disposed of with the same care as patient samples.

Sample analysis

- The samples must be analyzed using the same method that you use for the patient samples.
- Multiple determinations are only allowed if this is also done for patient samples.
- Samples must not be forwarded to other laboratories.

Results submission

- If the results are not submitted via the online system, the protocol sheet must be signed by the responsible laboratory manager/physician
- The results may only be discussed with colleagues from other laboratories once the proficiency test has been completed.

Administration

- Please do not forget to keep a copy of your results until you have received and checked the evaluation.
- We advise you to keep the samples until you have received the results. In the event of unsatisfactory results, you can re-analyse your samples.

The following device-specific instructions can be found at www.MQZH.ch under "Instructions":

Afias	GeneXpert
Afinion	Schnelltests
ABL90 Flex+	Hemoscreen
ABL800 Flex Serie	Piston pipette
ABL80 Flex CO-OX	LapPad
AQT90	Lumira DX
A1cNOW	Mikrobiologie NAT (B11-B36)
Cholestec LDX	MicroINR/MicroINR Expert
Celltac Alpha MEK/1303/1305	MiniiSED
Coagu Chek XS/Pro II	Microsemi
Cobas b101	Mythic
Cobas h232	Piccolo Xpress
Cobas Pulse	QuickRead go
DCA Vantage	Spotchem EZ SP-4430 / D-Concept
EPOC	Uricult (B2)
Eurolyser Cube	Xprecia
Fuji Dri-chem	Virus genome detection (V2-V6)

Information about the specific samples

B1 Strep A Test

You will receive sample B1 as a liquid (it simulates the patient's nose, throat, etc.). Be sure to use the swab included in your rapid test pack and dip it into the sample B1. Then process the swab as if it were a patient sample.

B9 Bacteriology

Open the screw cap and disinfect the grey rubber. Reconstitute the samples with 0.5 ml 0.9% NaCl by injecting the liquid through the grey rubber using a sterile syringe.

B10 Gram stain

Material: Blood culture

Diagnose: Bacteremia

NEW: Please specify the appropriate code.

Code		Code	
10	Gram-positive Kokken	22	Gram-positive Stäbchen verzweigt
11	Gram-positive Kokken in Haufen	23	Gram-positive Stäbchen plump
12	Gram-positive Kokken in Tetraden	24	Gram-negative Stäbchen
13	Gram-positive Kokken in langen Ketten	25	Gram-negative Stäbchen gebogen
14	Gram-positive Kokken in kurzen Ketten	26	Gram-negative Stäbchen fusiform
15	Gram-positive Diplokokken	30	Hefezellen
16	Gram-negative Kokken	31	Pseudohyphen
17	Gram-negative Diplokokken	32	Gram-labile Stäbchen
20	Gram-positive Stäbchen	33	Keine Bakterien
21	Gram-positive Stäbchen coryneform		

B31 SARS CoV-2, NAT

Sample B31 can be diluted 1:2 with NaCl if the amount of sample material is insufficient.

B33 SARS CoV-2 Antigen Rapid Test

You will receive the B33 sample as a liquid (it simulates the patient's nose). Be sure to use the swab, which is included in your rapid test kit. You can find detailed instructions on www.MQZH.ch

G1, G3, G4, G18-G22, Coagulation

Pipette 1 ml distilled water into the vial, close and mix gently. Allow to stand for 30 minutes at room temperature. Mix again carefully by hand before measurement. Measure within 2 hours.

G06, D-Dimers

The sample must be mixed particularly carefully before analysis. To do this, turn the sample 20-30 times and tip it upside down.

H4 Blood parasites

Possible codes:

100	No parasites found
101	Plasmodium
102	Plasmodium falciparum
103	Plasmodium malariae
104	Plasmodium vivax
105	Plasmodium ovale
106	Trypanosoma sp.
107	Mikrofilaria
199	Others:

H6, H7 Hemogram automatic 5-Part / Retikulocytes

These proficiency test samples are analysed in the same way as patient samples. Please measure the samples immediately after receipt!

H13, Cell counts Body Fluid

The sample must be mixed particularly carefully before analysis.

H15, ESR miniSED

Important: Store the sample at room temperature. Place the tubes on a mechanical rocker or rotator for approx. 30 minutes before use. Do not cover the barcode on the sample. The barcode must be scanned.

K1 Clinical chemistry**Estimated glomerular filtration rate (eGFR)**

In order to assess a patient's renal function, plasma creatinine should be measured and the eGFR should be calculated. In the protocol sheet, all participants who measure creatinine will find an additional entry for the eGFR. If you do not yet work with the eGFR, you will find further information and a calculator at www.mqzh.ch.

Patient details: 50-year-old man, skin color white, (weight 80 kg)

K3 HbA1c

Participants with Afinion: Please perform the determination as soon as possible (fresh whole blood)

K29 Calprotectine, K51 Pancreatic elastase

Samples from these interlaboratory tests can be treated as liquid stool samples.

If it is not possible to measure the sample on the day of arrival, please store them at -20°C.

K38 Immunofixation

Specimen description: from different patients.

Codes for immunofixation interpretation: (Please specify the appropriate code.)

Codes	In the immunofixation appears a:
1	monoclonal component type IgA Kappa
2	monoclonal component type IgA Lambda
3	monoclonal component type IgG Kappa
4	monoclonal component type IgG Lambda
5	monoclonal component type IgM Kappa
6	monoclonal component type IgM Lambda
7	Oligoclonal immunoglobulin responses indicate limited heterogeneity of synthesized immunoglobulins
8	Inconspicuous findings, no further investigations
9	In the event of a suspected artifact or unclear findings, possibly further clarification. Please send us your image with the result

K39 Folate in Erythrocytes

The hematocrit of the sample is indicated on the label. Please process the sample immediately after receipt. If you cannot analyze the sample immediately, please store it at -20°.

K48 Creatinin and ketone WB

These proficiency test samples are measured like patient samples. Please measure the samples immediately after receipt!

K54 CO-Oxymetry

Cobas b123: Measure the sample in quality controll mode. All other devices: Please contact the manufacturer of the respective device directly for further instructions.

S1 Fecal occult blood

The simulated stool sample is ready for use and used exactly like a patient sample.

U2, urine test strips

Please record your result as for patient samples.. (Submission in numbers or +++ is possible))

U04, Urine sediment

Please record your result as for patient samples.. (Submission in numbers or +++ is possible))

Procedure

Enclosed you will receive 5 photos with images of urine sediment components. The following types of images we will use: PK=phase contrast, HF=bright field.

Your task is to identify the objects marked with an arrow using the two-digit codes below. On the protocol sheet, you will find five entries ("Image 1" to "Image 5") in the "Urine Sediment" section where you can enter the codes.

Sample description: 40-year-old patient, (f).

Urin-Teststrip

Test	Resultat	Unit	Reference
Glucose, ql	neg		neg
Protein, ql	++++		neg
Bilirubin	neg		neg
Urobilinogen	norm		norm
pH	5.0		5.0-7.5
Specific gravity	1.026	g/ml	1.020-1.030
Erythrozyten, ql	+		neg
Ketone	neg		neg
Nitrite	neg		neg
Leukocytes	+++		neg

The images are all from the same sample and were taken with a 40x objective.

IMPORTANT: Note the scale at the bottom right to estimate the size of the elements.

More images of this sample can be found on the web at www.mqzh.ch in the photo album.

Codes

10 Erythrocytes normal	40 Spermatozoa	60 Bacteria
11 dysmorphic Erythrocytes		61 Yeast/Fungi
12 Acanthocytes	50 Hyaline Casts	62 Trichomonas
	51 Granular Casts	
20 Leucocytes	52 Waxy Casts	70 Crystals and Salts
	53 Erythrocyte Casts	
30 Squamous Epithelia	54 Leucocyte Casts	80 Hair
31 Epithelia (other than squamous-)	55 Epithelia Casts	81 Mucus
32 Caudate Epithelia	56 Pseudocasts	82 Impurity
33 Round Epithelia	57 Lipids	83 Air bubble
34 Transitional Epithelia		99 Unknown
35 Renal Tubular Epithelial Cells		
36 Decoy Cells		

Several terms are possible for epithelia. Use the term that is common in your laboratory.

U06, Urinsediment Automat

The sample must be mixed thoroughly before analysis. To do this, turn the sample 20-30 times and tip it upside down. Do not shake!

H3 Differential Blood Smear

Patient data

	Age	Gender	Hb	Hk	Lc	Tc	Ec
2025-3 H3A	62	m	69 g/l	0.203 l/l	164.33 G/l	388 G/l	2.18 T/l
2025-3 H3B	56	m	142 g/l	0.404 l/l	4.49 G/l	165 G/l	4.68 T/l

Instructions for filling out the H3 Protokoll

If your smear is defective or bad, we will gladly send you another one.

Leukocyte differentiation

For the differentiation of rod and segment nucleated neutrophil granulocytes you have to work according to the thread rule.

Neutrophils (rod + seg), lymphocytes/plasma cells and white precursors (promyelocytes + myelocytes + metamyelocytes) are automatically added together for QUALAB assessment.

For example, if you cannot distinguish the white precursors, it is possible to sum them up with a curly bracket.

IMPORTANT: Make sure that the sum adds up to 100%, otherwise you will get a "not fulfilled".

Morphological data

After you have assessed the morphology of the leukocytes, platelets and erythrocytes, you must select the most important features of this blood count for the report. (max. 5 codes)

To do this, enter the codes below under "Findings":

General Codes

29 Normal findings (do not add any other codes)

30 Pathologic findings, refer to expert

31 Pathologic findings, not referred to expert

(Note: Even if you write code 30 on a blood count, the leukocyte differentiation must be done in any case).

Leukocyte assessment

01 Hypersegmentation

02 Left shift

03 Pelger-Huet Abnormality

04 Toxic signs of neutrophils
(toxic granulation, basophilic strippling or vacuoles)

05 Atypical lymphocytes presumably reactive

06 Atypical lymphocytes probably neoplastic

07 Auer rods

08 other:

Thrombocyte assessment

09 Giant platelet

10 Platelet aggregates

11 other:

Erythrocyte assessment

12 Microcyten

13 Macrocytes

14 Hypochromasia

15 Polychromasia

16 Poikilocytosis

17 Elliptocytes/Ovalocytes

18 Stomatocytosis

19 Targetcells

20 Fragmentocytes

21 Spherocytes/Microspherocytes

22 Rouleaux

23 Erythrocyte agglutination

24 Howell-Jolly bodies

25 Basophilic strippling

26 Tear drops

27 other:

28 Parasites (please specify)

To meet the requirements, you must specify at least one code for both preparations, and differentiate the leucocytes.