

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

Instructions and patient details survey 2025-1



Important note for qualitative tests

Positive AND negative results must be documented, regardless of the method used to submit the results. An entry left blank will not be considered as negative, but as a "missing result"

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.

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: Sepsis

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.

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 Bloodcount 5-Part / Retikulocytes

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

H15, ESR miniiSED

Important: Store the sample at room temperature. Place the tubes on a mechanical rocker or rotator for approx. 30 minutes before use. 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 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 you will find further information and a calculator at www.mqzh.ch.

Patient details:20-year-old man, skin color white, (weight 70 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 Immunfixation

Specimen description: from different patients.

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

Codes	Description
	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!

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))

H3 Differential Blood Smear

Patient data							
	Age	Gender	Hb	Hk	Lc	Tc	Ec
2025-1 H3A	30	m	157 g/l	0.437 1/1	41.59 G/I	651 G/I	4.68 T/I
2025-1 H3B	50	m	114 g/l	0.35 I/I	4.37 G/I	210 G/I	3.8 T/I

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 refered 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 05 Atypical lymphocytes presumably reactive 02 Left shift 06 Atypical lymphocytes probably neoplastic

03 Pelger-Hüet Abnormaly 07 Auer rods 04 Toxic signs of neutrophils 08 other:

(toxic granulation, basophilic strippling or

vacuoles)

Thrombocyte assessment

09 Giant platelet 11 other:

10 Platelet aggregates

Erythrocyte assessment

12 Microcyten 20 Fragmentocytes

13 Macrocytes 21 Spherocytes/Microspherocytes

14 Hypochromasia 22 Rouleaux

15 Polychromasia23 Erythrocyte agglutination16 Poikilocytosis24 Howell-Jolly bodies17 Elliptocytes/Ovalocytes25 Basophilic strippling

18 Stomatocyosis 26 Tear drops 19 Targetcells 27 other:

28 Parasites (please specifiy)

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

U4 Urine sediment

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: 52-year-old patient, female.

Urin-Teststrip

Test	Resultat	Unit	Reference
Glucose, ql	neg		neg
Protein, ql	neg		neg
Bilirubin	neg		neg
Urobilinogen	neg		norm
pH	5.5		5.0-7.5
Specific gravity	1.015	g/ml	1.020-1.030
Erythrozyten, ql	neg		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 Erythorocyte 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.

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

Afias Fuji Dri-chem
Afinion Hemorchron jr
ABL90 Flex+ LumiraDX
ABL800 Flex Serie Hemoscreen

ABL80 Flex CO-OX Hematology blood gases
AQT90 Erythrocyte sedimentation
Uricult (B2) ImmunoCap rapid

Covid Test rapid (B33)

Microbiology NAT (B11-B36)

StatSensor

Piston pipette

Helicobater-Urease-Test MicroINR/MicroINR Expert

Cholestec LDX Microsemi
Coagu Chek XS/Pro II Mythic
Cobas b101 Xprecia
Differential blood smear Zybio Z3 CRP

Eurolyser Cube Virus genome detection (V2-V6)

Triage

Immunfixation

EPOC