



Instructions and patient details survey 2022-3

General

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

Sample handling

If nothing special is specified, you can use our proficiency test samples like patient material. Refrigerated samples must be removed from the refrigerator about 15-30 minutes (exception blood gas ampoules 5 hrs) before analysis so that they are 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.

All whole blood samples must always be turned over the head by hand 30-40 times until no more cells adhere to the bottom of the tube

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

- **IMPORTANT:** Check whether the information on the log sheet is correct and complete. You can write changes and additions directly on the sheet by hand or enter them in the "Notes" field in the online account..
- Please do not forget to keep a copy of your results until you have received and checked the evaluation.

The following samples require specific handling

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

K3 HbA1c

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

H6, H7 Bloodcount 5-Part / Retikulocytes

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

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.

U2, urine test strips

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

B1 Strep A Test

Use the swab as if it were freshly swabbed.

S1 Fecal occult blood

The simulated stool sample is ready for use. The application of the sample, which is done by the patient in the case of the patient sample, must also be performed.

K29 Calprotectine

The sample can be handled like liquid faeces.

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

K39 Folate in Erythrocyte

The hematocrit value of the sample can be read on the label. Please measure the sample immediately after receipt. If you cannot measure the sample immediately, please store at -20°C.

B9 - Bacteriology

Samples	5 samples (2x resistance testing, 5x identification).
Analyzes	Chapter 3.2.2 of AL.
Important	Dissolve and process specimen in the safety cabinet only!
Preparation	Use scissors to carefully remove the inner small golden metal ring (cap in the center top). Disinfect the rest of the metal cap and the gray rubber. Reconstituted specimens with 0.5 ml 0.9% NaCl by injecting the liquid through the gray rubber with a sterile syringe. Remove the outer golden metal ring (outside top lid) only after the samples have completely dissolved.
Note:	Even if you forward the material, you must still process it for the survey.

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

CoaguChek Pro II	Radiometer ABL800/80/90, AQT
Microsemi	Epoc
CoaguChek XS	Uricult
Quick Vue In-line Strep A	Cholestech LDX
Hemochron jr	ImmunoCAP RAPID
Micro INR	Simptomax
Xprecia	Blutsenkung
GeneXpert	SARS CoV-2 antigen rapid test

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)

H4 Blood parasites

Possible codes for identification:

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:

(For P. falciparum, indicate % of infected erythrocytes).

K38 Immunofixation

Specimen description: Patient: female, born 1969

Codes for the interpretation of the immunofixation. 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

B10 Gram stain

Material: Blood culture, Diagnosis: Sepsis
(Please mark only applicable answers)

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 female patient

Urin-Teststrip

		Ref. / Norm.
Glucose/Glucose/Glucosio	neg	neg
Protein/Protéine/Proteina	neg	neg
Bilirubin/Bilirubine/Bilirubina	neg	neg
Urobilinogen/Urobilinogène/Urobilinogeno	norm	norm
pH	6.5	5.0-7.5
Dichte/Densité/Peso spec.	1.005 g/ml	1.020-1.030
Erythrozyten/ Erythrocytes/Eritrociti	Spuren	neg
Ketonkörper / Corps cétoniques/Chetoni	neg	neg
Nitrit/Nitrite/Nitriti	neg	neg
Leukozyten/Leucocytes/Leucociti	+++	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.

H3 Differential Blood Smear

Patient data

	Age / Sex	Hb	Hk	Leuc	Tc	Ec
2022-2 H3A	72 m	126g/dl	0.374 l/l	5.38 G/l	55 G/l	3.35 T/l
2022-2 H3B	71 m	109g/l	0.368 l/l	6.30 G/l	430 G/l	4.87 T/l

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Instructions for filling out the H3 Protokoll

If your smear is defective or bad, we will gladly send you another one. Call us as soon as possible, our stock is limited.

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 Abnormaly

04 Toxic signs of neutrophils
(toxic granulation, basophilic stripping 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 stripping

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 leukocytes.