



EA MLA Signatory Český institut pro akreditaci, o.p.s. (Czech Accreditation Institute) Hájkova 2747/22, Žižkov, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products and on changes and amendments to some Acts, as amended

CERTIFICATE OF ACCREDITATION

No. 325/2025

Ústav hematologie a krevní transfuze with registered office U Nemocnice 2094/1, 128 00 Praha 2 Company Registration No. 00023736

> for the Medical Laboratory No. **8081** Komplement laboratoří ÚHKT

> > Scope of accreditation:

Laboratory diagnostics in clinical biochemistry, haematology (including flow cytometry methods), immunohaematology and transfusion service, cytogenetics, molecular genetics and medical microbiology, including shared examination procedures to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO 15189 ed. 3:2023

In its activities performed within the scope and for the period of validity of this Certificate, the abovementioned Accredited Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited conformity assessment body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 670/2024 of 10/12/2024, and/or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 01/11/2027

Prague: 30/06/2025





Signed in the Czech original: Milena Lochmanová on 30/06/2025

Milena Lochmanová Director of the Department of Medical Laboratories Czech Accreditation Institute

This translation of the Czech original has been issued by: Jana Chvalovská

Accredited entity according to ČSN EN ISO 15189 ed. 3:2023:

Ústav hematologie a krevní transfuze

CAB Number 8081, Komplement laboratoří ÚHKT U Nemocnice 2094/1, 128 00 Praha 2

Medical laboratory locations:

| 1. | Workplace No. 1 | U Nemocnice 2094/1, 128 00 Praha 2 |
|----|-----------------|------------------------------------|
| 2. | Workplace No. 2 | U Nemocnice 499/2, 128 00 Praha 2 |

3. Workplace No. 3 Kateřinská 521/19, 128 00 Praha 2

The laboratory applies a flexible approach to the scope of accreditation.

The current "List of activities within the flexible scope" is available on the website <u>https://www.uhkt.cz/laboratore/komplement-laboratori</u>.

1. Workplace No. 1

Examinations:

| Ordi nal Num ber | Analyte/ parameter/diagnostics | Principle of examination | Identification of procedure/equipment | Examined material | Degrees of freedom ¹ |
|---------------------------|---|--|---------------------------------------|-------------------|---------------------------------------|
| | | 222 - Trans | fusion Medicine | | |
| 1. | Reserved | | | | |
| 2. | Cross-match | CDC | In-house procedure | Blood | A, B |
| 3. | Identification of thrombocyte antibodies | Multiplex bead method | Commercial procedure | Serum | Α, Β |
| 4. | Screening of irregular anti-erythrocyte antibodies | Gel column agglutination (manual) | Commercial procedure | Serum, plasma | Α, Β |
| 5. | Identification of irregular anti-erythrocyte antibodies | Gel column agglutination (manual) | Commercial procedure | Serum, plasma | Α, Β |
| 6. | Direct antiglobulin test | Gel column agglutination (manual) | Commercial procedure | Blood | A, B |
| 7. | Detection of HIT- associated antibodies | Immunoassay with luminometric detection | Commercial procedure | Blood | А, В |
| 8. | Reserved | | | | |
| 9. | Examination of compatibility | Gel column agglutination (manual) | Commercial procedure | Blood | Α, Β |
| 10. | Blood type | Microplate agglutination | Commercial procedure | Blood | A, B |
| 11. | Erythrocyte antigens | Microplate agglutination | Commercial procedure | Blood | Α, Β |

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| Ordi nal Num ber | Analyte/ parameter/diagnostics | Principle of examination | Identification of procedure/equipment | Examined material | Degrees of freedom ¹ |
|---------------------------|--|--|---------------------------------------|-------------------|---------------------------------------|
| 12. | Screening of irregular anti-erythrocyte antibodies | Solid phase | Commercial procedure | Blood | Α, Β |
| 13. | Identification of anti- erythrocyte antibodies | Gel column agglutination (manual) | Commercial procedure | Blood | Α, Β |
| | | 802 – Med | lical Microbiology | | <u>.</u> |
| 1. | Detection of nucleic acid of infectious agents | Real-Time PCR | Commercial procedure | Clinical material | A, B, C, D |
| 2. | Detection of nucleic acid of infectious agents | Real-Time PCR | Commercial procedure | Clinical material | A, B, C, D |
| 3. | Detection of nucleic acid of infectious agents | Real-Time PCR | Commercial procedure | Clinical material | A, B, C, D |
| 4. | Antibodies to infectious agents | Immunoassay with luminometric detection (automated) | Commercial procedure | Serum, plasma | A, B, C |
| 5. | HIV markers | Immunoassay with luminometric detection (automated) | Commercial procedure | Serum, plasma | A, B, C |
| 6. | Antigens of infectious agents | Immunoassay with luminometric detection (automated) | Commercial procedure | Serum, plasma | A, B, C |
| 7. | Reserved | | | | |
| | | 813 - Allergology an | d Immunology Laboratory | | |
| 1. | Immunophenotyping of lymphoid subpopulations | Flow cytometry | Commercial procedure | Clinical material | A, B, C, D |
| 2. | Determination of stem cells | Flow cytometry | Commercial procedure | Clinical material | A, B, C, D |
| 3. | Determination of PNH clones | Flow cytometry | In-house procedure | Clinical material | A, B, C, D |
| 4. | Immunophenotyping of leukocytes | Flow cytometry | In-house procedure | Clinical material | A, B, C, D |
| 5. | Examination of VASP phosphorylation in blood platelets | Flow cytometry | Commercial procedure | Clinical material | A, B, C, D |
| 6. | Determination of residual disease in CLL | Flow cytometry | In-house procedure | Clinical material | A, B, C, D |

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| Ordi nal Num ber | Analyte/ parameter/diagnostics | Principle of examination | Identification of procedure/equipment | Examined material | Degrees of freedom ¹ |
|---------------------------|---|-------------------------------|--|---|---------------------------------------|
| 7. | Determination of residual disease in B- ALL | Flow cytometry | In-house procedure | Clinical material | A, B, C, D |
| 8. | Determination of residual disease in MM | Flow cytometry | In-house procedure | Clinical material | A, B, C, D |
| 9. | Determination of residual disease in AML | Flow cytometry | In-house procedure | Clinical material | A, B, C, D |
| 10. | Examination of antiHLA antibodies | xMAP technology | Commercial procedure | Blood | A, B |
| 11. | Examination of HLA system | CDC | In-house procedure | Blood | A, B |
| 12. | Examination of antiHLA antibodies | CDC | In-house procedure | Blood | A, B |
| | · | 814 - Toxico | logical Laboratory | · | |
| 1. | Determination of antifungal drugs | LC-MS/MS | Commercial procedure | Blood | A, B, C |
| 2. | Determination of immunosuppressants | LC-MS/MS | Commercial procedure | Blood | A, B, C |
| | | 816 – Medical | Genetics Laboratory | | |
| 12. | Reserved | | | | |
| 3. | Examination of somatic genome variants | Multiplex RT-PCR | In-house procedure | Biological material containing human nucleic acid | A, B, C, D |
| 4. | Examination of somatic genome variants | Real-Time PCR | In-house procedure | Biological material containing human nucleic acid | A, B, C, D |
| 5. | Examination of somatic genome variants | Direct sequencing (Sanger) | In-house procedure | Biological material containing human nucleic acid | A, B, D |
| 6. | Examination of somatic genome variants | Real-Time PCR | Commercial procedure | Biological material containing human nucleic acid | A, B, D |
| 7. | Examination of germline genome variants | Direct sequencing (Sanger) | In-house procedure | Biological material containing human nucleic acid | A, B, D |
| 8. | Examination of somatic genome variants | PCR with fragment analysis | In-house procedure | Biological material containing human nucleic acid | A, B, D |

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| Ordi nal Num ber | Analyte/ parameter/diagnostics | Principle of examination | Identification of procedure/equipment | Examined material | Degrees of freedom ¹ |
|------------------------------|--|--|--|---|---------------------------------------|
| 9. | Examination of somatic genome variants | Real-Time PCR | Commercial procedure | Biological material containing human nucleic acid | A, B, D |
| 10. | Reserved | | | | |
| 11. | Examination of germline genome variants | PCR with reverse hybridization | Commercial procedure | Biological material containing human nucleic acid | A, B, D |
| 12. | Examination of somatic genome variants | Real-Time PCR | Published procedure | Bone marrow, peripheral blood | A, B |
| 13. | Examination of germline genome variants | PCR-SSP | Commercial procedure | Blood | A, B, C |
| 14. | Examination of germline genome variants | PCR-SSP | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 15. | Examination of germline genome variants | Real-Time PCR | Commercial procedure | Blood | A, B |
| 16. | Examination of somatic genome variants | NGS-MPS | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 17. | Examination of somatic genome variants | NGS-MPS | In-house procedure | Biological material containing human nucleic acid | A, B, C, D |
| 18 | Examination of somatic genome variants | Digital PCR | In-house procedure | Biological material containing human nucleic acid | A, B, D |
| 19. | Examination of somatic genome variants | Real-Time PCR | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 818 - Haematology Laboratory | | | | | |
| 1. | Activated partial thromboplastin time | Coagulation method with mechanical detection of coagulum; Calculations | Commercial procedure | Plasma | Α, Β |
| 2. | Prothrombin test | Coagulation method with mechanical detection of coagulum; Calculations | Commercial procedure | Plasma | Α, Β |

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|---------------------------|--|---|---------------------------------------|-------------------|---------------------------------------|
| 3. | D-dimers | Immunoassay with turbidimetric detection | Commercial procedure | Plasma | A, B |
| 4. | Fibrinogen | Coagulation method with mechanical detection of coagulum | Commercial procedure | Plasma | A, B |
| 5. | D-dimers | Immunoassay with fluorimetric detection | Commercial procedure | Plasma | A, B |
| 6. | Evaluation of bone marrow aspirate smear | Microscopy | Published procedure | Bone marrow | A, B |
| 7. | Determination of free haemoglobin | Spectrophotometry | In-house procedure | Plasma | A, B |
| 8. | Blood count | Flow cytometry; Impedance method; Photometry; Calculations | Commercial procedure | Blood | A, B |
| 9. | Peripheral blood smear analysis | Microscopy | Published procedure | Blood | A, B |
| 10. | Peripheral blood smear analysis | Digital microscopy | Published procedure | Blood | A, B |
| 11. | Quantitative determination of G-6- PDH | Spectrophotometry | Commercial procedure | Blood | A, B |
| 12. | Quantitative determination of haemoglobins | Capillary electrophoresis | Commercial procedure | Blood | A, B, C |
| 13. | Blood count with a five- part differential leukocyte count | Flow cytometry Impedance method; Photometry; Calculations | Commercial procedure | Blood | Α, Β |
| 14. | Reticulocytes | Flow cytometry; Impedance method; Calculations | Commercial procedure | Blood | A, B |
| 15. | Haemocoagulation factors in the intrinsic pathway | Coagulation method with mechanical detection of coagulum | Commercial procedure | Plasma | A, B, C |
| 16. | Antithrombin | Chromogenic method | Commercial procedure | Plasma | A, B |

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Ústav hematologie a krevní transfuze

CAB Number 8081, Komplement laboratoří ÚHKT U Nemocnice 2094/1, 128 00 Praha 2

Primary sample collection:

| Ordinal | Sample collection | Identification of sample | Collected material | Degrees od |
|---------------------|-------------------|--------------------------|--------------------|----------------------|
| Number ² | technique | collection procedure | | freedom ¹ |
| 1. | Venepuncture | Published procedure | Venous blood | A, B |

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Ústav hematologie a krevní transfuze

CAB Number 8081, Komplement laboratoří ÚHKT U Nemocnice 2094/1, 128 00 Praha 2

2. Workplace No. 2

Examinations:

| Ordinal Number | Analyte/ parameter/diagnostics | Principle of examination | Identification of procedure/equipment | Examined material | Degrees of freedom ¹ |
|-------------------|---|--|--|----------------------------------|---------------------------------------|
| | | 816 – Medical (| Genetics Laboratory | | |
| 1. | Examination of constitutional karyotype | Conventional cytogenetic analysis | Commercial procedure | Bone marrow, peripheral blood | Α, Β |
| 2. | Examination of chromosomal aberrations | FISH | Commercial procedure | Bone marrow, peripheral blood | А, В |
| 3. | Examination of chromosomal aberrations | mFISH; mBAND; Fluorescence microscopy | Commercial procedure | Bone marrow, peripheral blood | Α, Β |

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Ústav hematologie a krevní transfuze

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3. Workplace No. 3

Examinations:

| Ordinal Number | Analyte/ parameter/diagnostics | Principle of examination | Identification of procedure/equipment | Examined material | Degrees of freedom ¹ |
|-------------------|---|-----------------------------|---|---|---------------------------------------|
| | | 816 – Medical | Genetics Laboratory | | |
| 1. | Examination of HLA genotype | PCR-SSP | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 2. | Examination of HLA genotype | Real-Time PCR | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 3. | Examination of HLA genotype | NGS-MPS | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 4. | Examination of HLA genotype | Spectrophotometry | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 5. | Examination of germline genome variants | PCR-fragment analysis | In-house procedure; Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 6. | Examination of somatic genome variants | PCR-fragment analysis | In-house procedure; Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 7. | Examination of germline genome variants | Real-Time PCR | In-house procedure; Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 8. | Examination of somatic genome variants | Real-Time PCR | In-house procedure; Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |
| 9. | Examination of HLA genotype | NGS-MPS (2nd generation) | Commercial procedure | Biological material containing human nucleic acid | A, B, C, D |

Explanatory notes:

- ¹ Established degrees of freedom according to MPA 00-09-..:
 - A Flexibility concerning the documented examination / sample collection procedure
 - B Flexibility concerning the technique
 - C Flexibility concerning the analytes / parameters
 - D Flexibility concerning the examined material

If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for this examination.

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U Nemocnice 2094/1, 128 00 Praha 2

| FISH | Fluorescence in situ Hybridization |
|------------------|---|
| mBAND | High resolution multicolor banding |
| NGS-MPS | New Generation Sequencing - Massively Parallel Sequencing |
| PCR | Polymerase Chain Reaction |
| Real-Time PCR | Polymerase Chain Reaction in real time |
| PCR-SSP | Polymerase Chain Reaction with Sequence Specific Primers |
| CDC | Microlymphocytotoxic test |
| HIT | Heparin-Induced Thrombocytopenia |
| PNH | Paroxysmal nocturnal hemoglobinuria |
| Multiplex RT-PCR | Reverse transcription-multiplex Polymerase Chain Reaction |
| CLL | Chronic lymphocytic leukemia |
| B-ALL | B-cell acute lymphoblastic leukemia |
| MM | Multiple myeloma |
| AML | Acute myeloid leukemia |
| LC-MS/MS | Liquid chromatography with mass spectrometry |
| G-6-PDH | Glucose-6-phosphate dehydrogenase |
| | |

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."