

Immunological Diagnostics Laboratory

Fabian Hauck, MD, PhD. Thomas Magg, PhD
Klinikum der Universität München-Innenstadt,
Dr. von Hauner Children's Hospital
Director: Christoph Klein, MD. PhD

Lindwurmstr. 4, 80337 Munich, Germany

Phone.:+ 49 (089) 44005 2831

Fax: +49 (089) 44005 7759

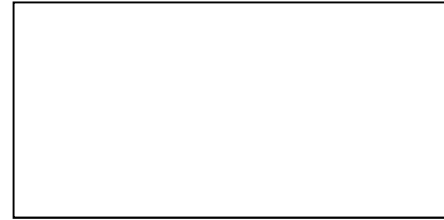
Email: ilab@med.uni-muenchen.de

Email: fabian.hauck@med.uni-muenchen.de



Detailed patient data

Sender (stamp)



1. DIAGNOSIS _____

2. MEDICATION _____

3. IgG-SUBSTITUTION i.v. s.c. none Date of latest substitution:

Lymphocytes

Heparin-blood: Na-heparin without preserving agents

Please provide absolute numbers of a differential blood count from the blood sample sent for testing.

Quantitative lymphocyte analysis

- T-, B-, NK-cells
- B-cell subpopulations (IgD/IgM/CD27/CD21/CD38)
- Recent thymic emigrants (CD4⁺CD31⁺CD45RA⁺)
- Double negative T-cells (TCR $\alpha\beta$ /TCR $\gamma\delta$ /CD4/CD8)
- Naive and memory T-cells (CD45RA/CCR7)
- Regulatory T-cells (CD4⁺CD25⁺FOXP3⁺)
- TH17 T-cells (induced IL-17)
- Natural killer-T-cells (Va24⁺V β 11⁺)
- Mucosal-associated invariant T-cells (CD161⁺Va7.2⁺)

Lymphocyte proliferation

- CD3/CD28-stimulation (CFSE-dilution)

Additional special testing

- CARMIL2-expression
- BTK-expression
- MHC-class-I-expression
- DOCK8-expression
- ITK-expression
- WASP-expression
- CD40-ligand and CD40-expression
- TCRVbeta-repertoire
- γ - SCID-screening (pSTAT5)
- IL10R-screening (pSTAT3)
- Resting and stimulated NK-cell-degranulation
- Stimulated CTL-degranulation
- Perforin-expression
- SAP-expression
- XIAP-expression
- XIAP functional testing (MDP-stimulation)
- CTLA4 on regulatory T-cells
- LRBA-expression
- FAS-ligand-induced apoptosis

Granulocytes

Heparin-blood: Na-heparin without preserving agents

- Dihydrorhodamine-test (DHR)
- Myeloperoxidase (MPO)
- Flavocytochrom b558-expression (7D5 antibody)
- Adhesion proteins (CD11/CD18)
- CD62L-shedding

Immunoglobulins and antibodies

Serum

- IgG-subclasses, quantitative
- IgA-subclasses, quantitative
- Diphtheria H. influenzae type b
- Tetanus Pneumococcus

Saliva – special tube

- Secretory IgA

Enzymes

EDTA-blood

- Adenosin-deaminase (ADA)
- Purin-nucleoside-phosphorylase (PNP)

Genetics

EDTA-blood

Only after written informed consent!

Genetics only after individual counseling:

- (Severe) combined immunodeficiency [(S)CID]
- Severe congenital neutropenia (SCN)
- Inflammatory bowel disease (IBD)
- Hyper-IgE syndrome (HIES) **Please join HIES-score**
- Immundysregulation-syndromes
- Wiskott-Aldrich syndrome
- Chronic mucocutaneous candidiasis (CMC)
- Whole exome sequencing
- Further particular demands:

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Important information:

Please contact the laboratory always before drawing and sending blood. Phone.:+ 49 (089) 44005 2831

Special testing has to be scheduled 1-2 weeks prior to analysis via phone or email.

For external testing: Please provide health insurance coverage or payment modalities. Please send a medical report.

You can find the testing menu, the HIES-score and the informed consent sheet for genetic testing in the download area of the Immunodeficiency Unit.

Date of blood drawing

Name and signature of responsible physician



12009998 Labor

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Blood drawing conditions

Analysis days for lymphocyte proliferation, special testing and granulocytes

Every Tuesday and Thursday after appointment has been set up.
Blood samples have to arrive in the laboratory until 11 a.m.

Blood drawing

Prepare a sterile tube by adding approximately 5,000 IU Na-heparin per ml whole blood.
Add blood to the tube and gently reverse the tube 3 to five times.
Do not centrifuge or freeze the blood sample, but send it immediately to the laboratory at room temperature.
During winter consider protecting the blood sample e.g. in special secondary tubes.
Do not use other anticoagulants such as NH₄ or Li-heparin as this can interfere with testing.

Sample material and minimal sample volume

Na-heparin whole blood

Quantitative lymphocyte analysis	1 ml
Lymphocyte proliferation	5 ml
Dihydrorhodamine-test (DHR)	2 ml
Special testing	Please contact the laboratory

EDTA-whole blood

Enzymes	2.7 ml
gDNA-extraction and molecular genetics	2.7 ml

Serum

Immunoglobulins and antibodies	2.7 ml
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Important notice

After transfusion (red blood cells, thrombocytes, granulocytes, stem cells, CAR T-cells), especially after substitution of immunoglobulins (SCIG, IVIG) and after immunosuppressive or cell depleting treatments (steroids, CSA, tacrolimus, MMF, sirolimus, rituximab, alemtuzumab, daratumumab, etc.) the performance and interpretation of particular tests can be limited or impossible. We therefore ask for detailed information of pre-testing discussion to provide you with the most reliable results.

Blood samples from external senders

In addition to the patient samples, please provide a 10 ml blood samples as a travel control from a healthy adult. Please equally adhere to the blood drawing and sample material conditions.

Shipping time point for lymphocyte proliferation

Express shipping preferably on Monday or when indicated on Wednesday to allow for sample testing on the next day that would be Tuesday or when indicated Thursday.

Shipping time point for granulocytes

Blood samples have to be drawn the very same day as the testing is scheduled for and has to arrive in the laboratory until 11 a.m. Shipping should therefore be done by taxi, fast train or airplane and supervised by a courier.

Please provide health insurance coverage or payment modalities.

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