Formular zurücksetzen

Patient information

Result-/Return address

alternativ clinic stamp

Name of clinic

Adress

Phone Fax

UNIVERSITÄTS KLINIKUM FREIBURG

CCI - Advanced Diagnostics Unit

Breisacher Str. 115 • 79106 Freiburg
Telefon: 0761 270-71010
Telefax: 0761 270-9671070
cci.diagnostik@uniklinik-freiburg.de
www.cci.uniklinik-freiburg.de

Centrum für Chronische Immundefizienz

CCI immunodeficiency diagnostics

Processing only after prior registration (note shipping conditions on page 2)

Sample registration: +49 (0)761 270-71010, telephone Clinical information: +49 (0)761 270-77550 (ped.) / +49 (0)761 270-77640 (adult.)

1. Suspected diagnosis/main symptoms (please enclose summary/last doctor's letter)

Date of blood collection:

Time of blood collection:

☐ Cortisone > 0.5 mg/kg ☐ Immunosuppressants:

☐ Statement after Rituximab ☐ none ☐ Statement after HSZT

2. Cost carrier (please tick, if no information is provided, billing will be done via the sender)

☐ outpatient: GKV patient (enclose laboratory referral form 10BF or 10; only within Germany) ☐ inpatient/abroad: invoice to sender/clinic

☐ private/self-payers (invoice to patient, please provide address) ☐ other:

invoice recipient:

3. Individual requirements (5 mL EDTA blood each; [1] = **control blood required**, see page 2); [2] **= blood count required**

Lymphocyte Phenotyping

☐ Lymphocyte populations with naïve and activated T cells (T, B, NK cells, CD45RA/RO, HLA-DR; **Diff-BB required for assessment**)[1]

☐ T cell phenotyping (TCRαβ/γδ, naïve, memory, TEMRA - CD57; only in combination with LP)

☐ B cell phenotyping (memory, switched, IgG+, IgA+, plasmablasts, transitional, CD21low)

☐ T cell repertoire (24 Vβ chains)

SCID Panel (NG Screening)

☐ Stage 1[2]: Lymphocyte phenotype with naïve and activated T cells

☐ Stage 2[1,2]: T-phänotyp., proliferation, ADA, Vα7.2 T cells (VDJ-Rec. Def.)

HLH Panel

☐ Fresh NK cell degranulation (**FHL, CHS, GS**)[1]

☐ Stimulated NK cell / CTL degranulation (IL2)[1]

Protein Detection[1]

☐ Perforin in NK cells[1]

☐ SAP in Lymphocytes (**XLP1**, in boys)[1]

☐ XIAP in Lymphocytes (**XLP2**, in boys)[1]

☐ CD27 on T cells (in EBV)[1]

Serum Parameters (3 ml serum)

☐ Soluble IL2 Receptor (sCD25)

ALPS Panel

☐ ALPS Biomarker: sFasL, Vit B12 (from Li-Heparin, 3ml, every 4 weeks)

☐ TCRαβ DNT cells (5 mL EDTA blood)

IBD Panel

☐ Granulocyte function:[1] Oxidative Burst (**CGD, IBD**)

☐ XIAP in Lymphocytes[1] (**XLP2**)

☐ XIAP/NOD2 function test (**XLP2, IBD**) (with altered XIAP expression)[1]

☐ IL10R function (only in infants, after consultation)[1]

☐ Regulatory T cells (FoxP3, **IPEX**)[1]

Special Cell Populations[1]

☐ Dendritic cells[1] (pDC, mDC; **GATA2 Defect**)

☐ MAIT cells[1] (Vα7.2/CD161; e.g. **XLP2**)

☐ NKT cells[1] (Vα24/Vβ11; e.g. **XLP1**)

☐ Regulatory T cells[1] (FoxP3; **IPEX**)

Protein Detection[1]

☐ CD11b/CD181[1] (**LAD Typ 1**)

☐ CD40 on B cells[1] (**HIGM**)

☐ CD40L on T cells[1] (**HIGM**)

☐ SAP in Lymphocytes[1] (**XLP1**)

☐ XIAP in Lymphocytes[1] (**XLP2**)

☐ NKG2D on NK cells[1] (**MAGT1, EBV**)

☐ CD27 in Lymphocytes[1] (**CD27 deficiency**)

☐ BTK in Monocytes[1] (**XLA**)

☐ WASP in Lymphocytes[1] (**WASP**)

T Cell Function[1]

☐ T cell proliferation[1] (PHA, αCD3, αCD3/CD28)

☐ T cell activation markers CD25, CD69[1] (**CID/SCID**)

☐ IL-2 / IFNγ[1]

☐ IL-4 / IFNγ[1]

☐ IL-17 / IFNγ[1] (**STAT1 GOF, HIES**)

☐ STAT1 phosphorylation[1] (**STAT1 GOF**)

☐ STAT5 phosphorylation[1] (**X-SCID**)

☐ STAT6 phosphorylation[1] (**X-SCID**)

☐ NFκB p65 phosphorylation und IκBα degradation[1] (IgM stimulation; e.g. **CARD11, MALT1, BCL10**)

☐ ADA2 Enzyme deficiency test[1] "ADA2 Enzyme Deficiency Suspected"; contact: Frau Dr. Grünert/Frau Dr. Schumann, phone.: 0761 270-43680)

Granulocyte/Monocyte Function

☐ Oxidative Burst (**CGD, IBD**)[1]

☐ TLR function test[1] (LPS Stimulation, **IRAK-4, MyD88**)

☐ Type 1 Interferon function test[1] (VSV-GFP, **IFNAR, TYK2, STAT1, STAT2**)

Serum Parameters (je 3 mL serum)

☐ Anti-Pneumococcal Polysaccharide Antibodies (IgG, 9 Serotypes) (IgG) (optimal before and 4 weeks after vaccination; not under IgG substitution; normal postal shipping possible)

☐ Before vaccination

☐ _____ Weeks after vaccination

Sample Storage (as per page 2)

☐ Material is to be stored (consent enclosed)

4. Comments and signature

Notes:

Date ✕ Name (legible) and signature of the doctor

For feedback: Email: Phone:

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Formular zurücksetzen

CCI Immunodeficiency Diagnostics

Requirements for sample material

For each submission, a telephone registration with an appointment is required before shipping. Unannounced samples cannot be processed. Please ask for the amount of blood or serum required for your request when making an appointment. Please fill out the request form completely. The following information is required for processing:

- Complete patient data (name, first name, date of birth) on the request form and blood tube
- Date and time of sample collection
- Contact details of the sender for sending the results
- Insurance status (laboratory referral form form 10BF or 10)
- Billing address: _____

[1] For functional blood tests, an additional blood sample from a healthy adult, unrelated control person is required. This is important in order to exclude artifacts from storage and transport as much as possible. Please check the request form to see if this applies to the tests you want.

Shipping conditions

The samples must be sent at room temperature and, unless otherwise stated, **must arrive in the laboratory within 24 hours** of blood collection and **no later than 9 a.m.** on the day after blood collection. Only use shipping services that offer a corresponding service (e.g. DHL, TNT, GO Express). The blood tubes must be packed in a leak-proof outer tube or bag with absorbent material and the packages must be marked for shipping with "medically exempt sample" or "UN 3373". In extreme temperatures (<5°C and >30°C), please ensure that the samples are well insulated to avoid cell damage.

Send the sample to the following address:

University Hospital Freiburg
CCI - Diagnostics in the ZTZ
Breisacher Str. 115, EG
79106 Freiburg

Prof. Dr. Stephan Ehl (Focus: All immune deficiencies in childhood; in particular: SCID, combined immune deficiencies, immune deficiencies with autoimmunity, HLH) and **Prof. Dr. Klaus Warnatz** (Focus: antibody deficiency syndromes, combined immune deficiencies, complement deficiencies in **adults**) are available to you as clinical contacts.

Ped. secretariat.: 0761 270-77550 (Prof. Dr. Ehl), Adult secretariat: 0761 270-77640 (Prof. Dr. Warnatz)

The results of individual analyses can be influenced by the patient's clinical condition and medication, so the correct interpretation of the test results is only possible in the context of clinical findings. Please provide these to us (e.g. in the form of doctor's letters). Further tests for immunodeficiency diagnostics are possible after consultation.
The costs for the requested tests are available on request.

Sample storage

Your patient's material may also be of interest for scientific questions in the future. We would therefore like to ask you to inform the patient about our study: “CCI Biobank” and to ask them to give their consent by signing the consent form “Examination and storage of biomaterial” (available at https://www.uniklinik-freiburg.de/cci/immunologische-diagnostik.html). It is not possible to store samples without a consent form.
Thank you for your support.

We are happy to answer any questions you may have.
The laboratory team

Legend:

ADA2	= Adenosin deaminase 2	IPEX	= Immune Dysregulation, Polyendocrinopathy, Enteropathy, X-linked Syndrome
ALPS	= Autoimmune Lymphoproliferative Syndrome	LAD	= Leukocyte adhesion defect
BTK	= Bruton's Tyrosine Kinase	(S)CID	= (Severe) Combined Immunodeficiency
CGD	= Chronic Granulomatous Disease	TLR	= Toll-Like-Receptor
CMC	= Chronic Mucocutaneous Candidiasis	XLA	= X-linked Agammaglobulinemia
HIES	= Hyper-IgE Syndrome	XLP	= X-linked Lymphoproliferative Syndrome
HIGM	= Hyper-IgM Syndrome	XMEN	= X-linked immunodeficiency with magnesium defect, EBV infection and neoplasia (MAGT1 Mutation)
HLH	= Hemophagocytic Lymphohistiocytosis	WASP	= Wiskott-Aldrich-Syndrome Protein
IBD	= Inflammatory Bowel Disease		

[1] Blood from a healthy control person is absolutely necessary. Please be sure to include this with the patient sample.
[2] A current daily differential blood count is necessary to calculate the cell count. Please include this or send it later in electronic form.

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