

# REQUEST FORM: HEMATO-ONCO-GENETICS



**LABORATOIRE NATIONAL DE SANTE  
NATIONAL CENTER OF GENETICS**

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Forms available at [www.lns.lu](http://www.lns.lu)

| SAMPLE INFORMATION         |  | LNS BARCODE LABEL |
|----------------------------|--|-------------------|
| Your sample identification | <b>Sample type / quantity:</b><br><input type="checkbox"/> Heparin: .....<br><input type="checkbox"/> EDTA: .....<br><input type="checkbox"/> Bone marrow: .....<br><input type="checkbox"/> Peripheral Blood: .....<br><input type="checkbox"/> Other: .....<br><b>Date / Time of sampling:</b><br>...../...../.....<br>..... H ..... | LNS label         |
| Your ID Label              |  |                   |

## PHYSICIAN REQUESTING THE TEST

Surname and first name of the doctor requesting the test

Address and country

Telephone / direct line      Fax

Date of request

Signature / Stamp

## PATIENT INFORMATION

Birth name      First name

Married name      Sex

Date of birth      National identification number



Address and country

Patient covered by the CNS     Yes     No

\*If not covered by the CNS, the patient will receive an invoice from the laboratory, which they may pass on to their insurance company, where applicable.

Copies to [Please note that results are returned only to the prescriber of the test, who is the only one authorized to give them to patients.]

## PREANALYTICAL CONDITIONS

|                           |   |  |
|---------------------------|---|--|
| <b>Karyogram and FISH</b> | <b>At least 10 ml heparinized blood (&gt;10% Blasts)</b><br>or <b>5mL heparinized bone marrow</b>   | <br>(green tube: Heparin) |
| <b>Molecular genetics</b> | <b>At least 10 ml peripheral blood EDTA</b><br>or <b>5mL bone marrow EDTA</b><br>For <b>qRT-PCR BCR/ABL t(9;22)(p210)(quantitative) EDTA (10ml)</b> | <br>(purple tube: EDTA)   |

\*Specific sample: For NHL and MM → Bone marrow sample is mandatory

## CLINICAL INFORMATION (essential for the interpretation of results)

**Diagnosis**

CML       MPN       MDS       AML       B-CLL       MM/Plasmocytoma<sup>1</sup>  
 B-NHL<sup>1</sup>       T-NHL<sup>1</sup>       B-ALL       T-ALL       M. Waldenström       .....

<sup>1</sup> **Bone marrow sample mandatory !!!**

Suspicion       Initial diagnosis       Remission<sup>2</sup>       Control<sup>2</sup>       Recurrence<sup>2</sup>       Under treatment<sup>2</sup>  
 After bone marrow transplant<sup>2</sup> :       allograft      Sex  F     M       Autograft  
 After-chemotherapy<sup>2</sup>       .....

<sup>2</sup> **In case of a follow up / control, please send us initial reports, if they were not performed at LNS**

## TESTS REQUESTED

**Conventional cytogenetics and molecular cytogenetics**

**KARYOGRAM** (microscopic banding analysis)     **FISH** (Choose the Panel on **Page 2**)     **Moleculargenetics test** (Choose the box on **Page 3**)  
 (Decision based on indication)

## OTHER CLINICAL COMMENTS / SINGLE REQUESTS:

**FISH PANELS** (If you like to have FISH analysis, please check the right Panel) **Anaplastic Large cell lymphoma**

ALK Breakapart Probe (2p23.2-p23.1)

 **Aplastic Anemia**

Del(7)(q22q31)

Centromere 6, 8 and 21

RB1/DLEU/LAMP (13q14.2 / 13q14.2 / 13q34)

TP53/17CEN (17p13.1 / 17p11.1)

 **Alk-positive DLBCL**

ALK Breakapart Probe (2p23.2-p23.1)

 **Alk-negative ALCL**

ALK Breakapart Probe (2p23.2-p23.1)

IRF4/DUSP22 Breakapart (6p25)

 **AML Panel**

EVI1 (MECOM) Breakapart (3q26.2)

DEK-NUP214: t(6;9)(p23;q11)

RUNX1/RUNX1T1: t(8;21)(q21.3;q22.1)

MLL (KMT2A) Breakapart (11q23.3)

ETV6 Breakapart (12p13.2)

PML/RARA: t(15;17)(q24.1;q21.1)

CBFB/MYH11 : t(16;16)(q22;q13.1)

BCR/ABL1: t(9;22)(q34;q22)

 **B-ALL Adult Panel**

MYC Breakapart probe (8q24.21)

BCR/ABL1: t(9;22)(q34;q22)

MLL (KMT2A) Breakapart (11q23.3)

IGH Breakapart (14q32.3)

 **B-ALL Child Panel**

P16 (CDKN2A) (9q21.3 / 9q12)

BCR/ABL1: t(9;22)(q34;q22)

MLL (KMT2A) Breakapart (11q23.3)

TEL/AML1 (ETV6/RUNX1): t(12,21)(q13.2;q22.1)

IGH Breakapart (14q32.3)

 **B-ALL Relapse Panel**

ABL2 Breakapart (1q25.2)

PDGFRB Breakapart (5q32)

JAK2 Breakapart (9p24.1)

IGH Breakapart (14q32.3)

CRLF2 Breakapart (Xp22.33 / Yp11.3)

 **B-NHL Panel**

BCL6 Breakapart (3q27.3-q28)

MYC Breakapart probe (8q24.21)

IGH Breakapart (14q32.3)

BCL2 Breakapart (18q21.33-q22.1)

 **Burkitt Lymphoma Panel**

BCL6 Breakapart (3q27.3-q28)

MYC Breakapart probe (8q24.21)

IGH Breakapart (14q32.3)

BCL2 Breakapart (18q21.33-q22.1)

 If MYC BA positive

IGK Breakapart (2p11.2)

IGL Breakapart (22q11.21-q11.23)

 **CEL / HES Panel**

ABL2 Breakapart (1q25.2)

FIP1L1/CHIC2/PDGFRB (4q12)

PDGFRB Breakapart (5q32)

FGFR1 Break/Ampli (8p11.23-p11.22)

JAK2 Breakapart (9p24.1)

ABL1 Breakapart (9q34)

ETV6 Breakapart (12p13.2)

 **CLL Panel**

Centromere 3 / Centromere 12

MYB/CCND3/SEC63 (6p21.1 / 6q21 / 6q23.3)

MYC Breakapart probe (8q24.21)

ATM (11p11.1-q11.1 / 11q22.3)

RB1/DLEU/LAMP (13q14.2 / 13q14.2 / 13q34)

IGH Breakapart (14q32.3)

TP53/17CEN (17p13.1 / 17p11.1)

 **CMML Panel**

FIP1L1/CHIC2/PDGFRB (4q12)

PDGFRB Breakapart (5q32)

FGFR1 Break/Ampli (8p11.23-p11.22)

BCR/ABL1/ASS1: t(9;22)(q34.1;q11.22)

JAK2 Breakapart (9p24.1)

 **Diffuse Large B-cell Lymphoma Panel**

BCL6 Breakapart (3q27.3-q28)

MYC Breakapart probe (8q24.21)

IGH Breakapart (14q32.3)

BCL2 Breakapart (18q21.33-q22.1)

 If MYC BA positive

IGK Breakapart (2p11.2)

IGL Breakapart (22q11.21-q11.23)

 **Fanconi Panel**

CKS1B/CDKN2C (1p32.3 / 1q21.3)

EVI1 (MECOM) Breakapart (3q26.2)

Del(7)(q22q31)

AML1 (RUNX1) Breakapart (21q22.1)

 **Follicular Lymphoma Panel**

BCL6 Breakapart (3q27.3-q28)

MYC Breakapart probe (8q24.21)

IGH Breakapart (14q32.3)

IGH-BCL2: t(14;18)(q32.3;q21.33)

 If MYC BA positive

IGK Breakapart (2p11.2)

IGL Breakapart (22q11.21-q11.23)

 **Haptosplenic T-cell Lymphoma Panel**

Del(7)(q22q31)

Centromere 8 and 12

 **Mantel cell lymphoma Panel**

BCL6 Breakapart (3q27.3-q28)

MYC Breakapart probe (8q24.21)

P16 (CDKN2A) (9p21.3 / 9q12)

IGH Breakapart (14q32.3)

IGH/CCND1 Plus: t(11;14)(q13.3;32.33)

TP53/17CEN (17p13.1 / 17p11.1)

 If MYC BA positive

IGK Breakapart (2p11.2)

IGL Breakapart (22q11.21-q11.23)

 **MALT Lymphoma Panel**

Centromere 3, 12

IGH Breakapart (14q32.3)

MALT Breakapart (18q21.31-q21.32)

 **MDS Panel**

Centromere X / Y

EVI1 (MECOM) Breakapart (3q26.2)

Del(5q)

Del(7)(q22q31)

Centromere 8, 9

ETV6 Breakapart (12p13.2)

TP53/17CEN (17p13.1 / 17p11.1)

Del(20q)

 **Multiple Myeloma Panel**

CKS1B/CDKN2C (1p32.3 / 1q21.3)

5p15/9q22/15q22

MYC Breakapart probe (8q24.21)

TP53/17CEN (17p13.1 / 17p11.1)

IGH Breakapart (14q32.3)

IGH-FGFR3: t(4;14)

IGH-MYEOV : t(11;14)

IGH-MAF plus : t(14;16)

 If IGH BA positive

IGH-CCND3: t(6;14)

IGH-MAFB : t(14;20)

IGH-cMyc: t(8;14) (only if MYC Rarr.)

 **MPN Panel**

PDGFRB Breakapart (5q32)

BCR/ABL1/ASS1: t(9;22)(q34.1;q11.22)

 **M. Waldenstrom Panel**

Centromere 3 / Centromere 4

MYB/CCND3/SEC63 (6p21.1 / 6q21 / 6q23.3)

MYC Breakapart probe (8q24.21)

ATM (11p11.1-q11.1 / 11q22.3)

RB1/DLEU/LAMP (13q14.2 / 13q14.2 / 13q34)

IGH Breakapart (14q32.3)

TP53/17CEN (17p13.1 / 17p11.1)

Centromere 12, 18

 **Nodal/Splenic Marginal Z.L**

Centromere 13 and 12

BCL6 Breakapart (3q27.3-q28)

Del(7)(q22q31)

IGH Breakapart (14q32.3)

MALT1 (18q21.31-q21.32)

 **sec AML Panel**

EVI1 (MECOM) Breakapart (3q26.2)

Del(5q)

Del(7)(q22q31)

Centromere 8, 9

MLL (KMT2A) Breakapart (11q23.3)

TP53/17CEN (17p13.1 / 17p11.1)

 **T-ALL Panel**

STIL/TAL1 (1p33)

TLX3 Breakapart (5q35.1)

MYB/CCND3/SEC63 (6p21.1 / 6q21 / 6q23.3)

TCRB Breakapart (7q34)

MYC Breakapart probe (8q24.21)

P16 (CDKN2A) (9p21.3 / 9q12)

TLX1 Breakapart (10q24.31)

MLL (KMT2A) Breakapart (11q23.3)

TCRAD Breakapart (14q11.2)

 **T-NHL Panel**

ATM (11p11.1-q11.1 / 11q22.3)

RB1/DLEU/LAMP (13q14.2 / 13q14.2 / 13q34)

TCRAD Breakapart (14q11.2)

 **T NK/LGL Leukemia Panel**

MYB/CCND3/SEC63 (6p21.1 / 6q21 / 6q23.3)

Del(7)(q22q31)

Centromere 8, 9

ATM (11p11.1-q11.1 / 11q22.3)

MLL (KMT2A) Breakapart (11q23.3)

RB1/DLEU/LAMP (13q14.2 / 13q14.2 / 13q34)

TP53/17CEN (17p13.1 / 17p11.1)

 **Other (please specify)**

**Moleculargenetics test** (If you would like to have a moleculargenetics test, please check the appropriate box)

**External Tests**

- Moleculargenetics test** (decision based on indication)
  - \*The test order will be forwarded to an external, specialized and accredited laboratory

**Single test:** .....

**Please check the appropriate box:**

- Hematological malignancies
- Hereditary haematological disease <sup>3</sup>

<sup>3</sup> *In the case of hereditary moleculargenetic tests, please fill in the consent form below.*

**In-house Tests**

- B-Cell Clonality**
- T-Cell Clonality**
- qRT-PCR BCR::ABL t(9;22) (p210) (quantitative)**
- JAK2 (V617F)**     **If JAK (V617F) Negative: CALR, MPL, JAK ex. 12\***

**CONSENT FORM**

By signing below, I consent to the genetic testing as indicated on the test request form in order to determine the genetic cause of the above-mentioned clinical condition.

I hereby confirm, that the requesting physician (signed below) has informed me in detail about the medical necessity, potential benefits and limitations of the planned genetic testing. In addition, possible consequences from the communication of the test result (e.g. psychological burden) were discussed.

|   |  |
|---|--|
| With your consent, <b>unused sample material</b> will be stored. Please decide if and how unused sample material may be used. I consent to the use of this material   |  |
| - for verifying the obtained results, laboratory quality assurance and future diagnostic investigations.  | <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> |
| - for the purposes of academic teaching and scientific research.  | <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> |
| I consent being informed <sup>1</sup> of <b>secondary/additional findings</b> <sup>2</sup> if these have direct medical implications (e.g. possible prophylactic measures or therapeutic consequences) or may constitute a significant genetic risk for me or my family members.<br><sup>1</sup> According to current scientific understanding and based on the present recommendations of the American College of Medical Genetics and Genomics (ACMG).<br><sup>2</sup> Variants that may be obtained incidentally during the course of genetic testing and are associated with a condition other than the one for which testing was originally indicated. | <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> |
| I consent that data and test results collected in the context of the condition in question may be used in de-identified (pseudonymized) form for <b>scientific research</b> <sup>1</sup> and published in anonymized form in medical journals.<br><br><sup>1</sup> e.g. to improve the understanding of the molecular pathogenesis and develop new diagnostic or treatment possibilities)   | <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> |

I am aware that my consent applies to me and/or to my minor child(ren) and I may withdraw this consent at any time, verbally or in writing, without giving reasons.

Place and date: \_\_\_\_\_

Signature of requesting physician \_\_\_\_\_

Signature of patient or legal representative(s) \_\_\_\_\_