

**Cytology | Cytochemistry**

 Peripheral blood  
and/or  
bone marrow aspirate  
smears analysis

**Immunophenotyping**
**Immunochemical assay**
**B cell markers with:  
Matutes scoring  
+ CD38  
+ CD200**
**Immunophenotyping for hairy cell  
leukemia:  
CD19, CD11c, CD25, CD103.**
**Immunophenotyping  
Plasma Cells panel: CD38, CD138,  
CD19, CD56, CD200, CD27, CD45, K/L.**
**Heavy/light chain isotype analysis**
**T-cell markers: CD2, CD3, CD5, CD7,  
CD4, CD8, TCRαβ, TCRγδ, CD16,  
CD56, CD57.**
**Conventional cytogenetics:  
hematological karyotyping**

 Blood  
karyotyping  
and/or

 Lymph nodes  
karyotyping  
and /or

 Invaded bone marrow  
karyotyping

**Molecular cytogenetics:  
Fluorescent in situ  
Hybridization (FISH)**

 CLL panel  
(ATM - chromosome 12 -  
chromosome 13 - TP53)

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(ATM - chromosome 12 -  
chromosome 13 - TP53)

 IgH-DC  
IgH-CCND1  
IgH-BCL2  
BCL6  
CMYC  
MALT  
7q

 Fish performed on selected plasma  
cells (CD138 magnetic beads)  
TP53/cap17  
Chromosome 1 status, IgH/DC,  
IgH/CCND1, IgH-FGFR3, IgH-MAF

 TCRa/d  
TP53  
ATM

**Molecular Biology**

Mutation TP53

B clonality

**BRAF  
(for hairy cell leukemia  
ONLY)**
**MYD88  
(for Lymphoplasmacytic  
lymphoma and  
Waldenstrom  
macroglobulinemia ONLY)**

 T clonality  
TCR rearrangement

**Mature B-cell neoplasms**

 Chronic lymphocytic leukemia / small lymphocytic lymphoma  
Monoclonal B-cell lymphocytosis

 B-cell prolymphocytic leukemia  
Splenic marginal zone lymphoma  
Hairy cell leukemia  
Lymphoplasmacytic lymphoma  
Waldenstrom macroglobulinemia  
Extranodal marginal zone lymphoma of mucosa-associated  
lymphoid tissue (MALT lymphoma)  
Nodal marginal zone lymphoma  
Follicular lymphoma  
Mantle cell lymphoma  
Diffuse large B-cell lymphoma (DLBCL)  
Burkitt lymphoma  
Burkitt – like lymphoma with 11q aberration  
High-grade B-cell lymphoma, with MYC and BCL2 and/or  
BCL6 rearrangements

 Monoclonal gammopathy of undetermined significance (MGUS)  
Plasma cell myeloma

**Mature T and NK neoplasms**

 T-cell prolymphocytic leukemia  
T-cell large granular lymphocytic leukemia  
Aggressive NK-cell leukemia  
Adult T-cell leukemia/lymphoma  
Hepatosplenic T-cell lymphoma  
Sezary syndrome / Mycosis fungoide  
Angioimmunoblastic T-cell lymphoma  
Anaplastic large-cell lymphoma

## Sample requirements

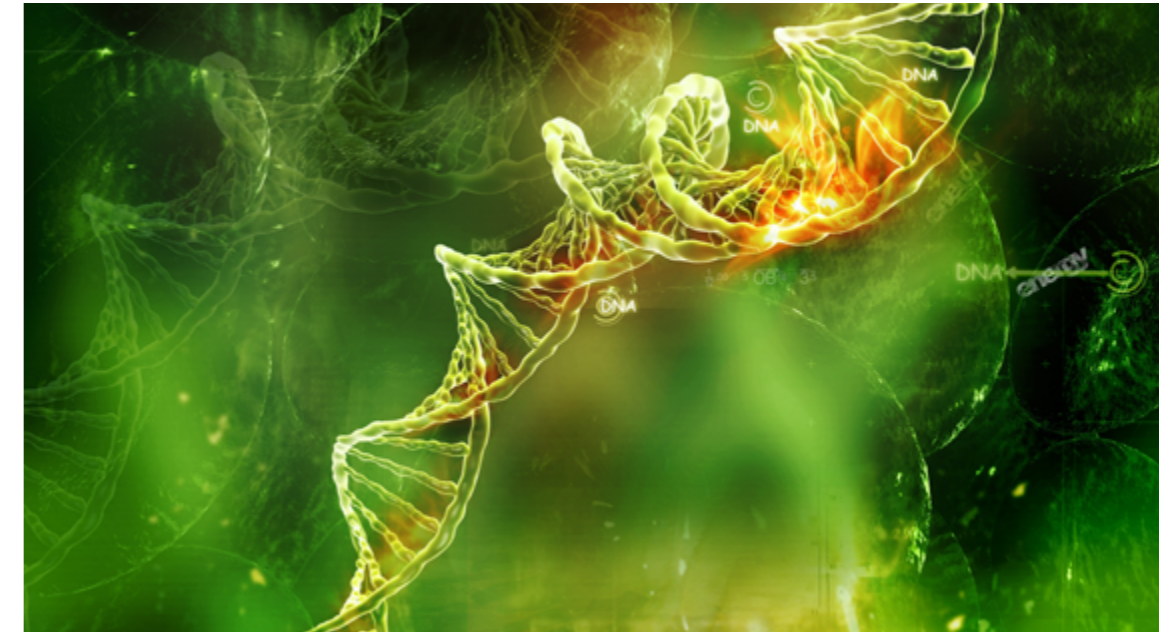
Sample must reach laboratory within 48 hours.

	Preanalytical				Temperature	Required informations	Test request form
	Blood	Bone marrow	Lymph nodes	Other			
<b>Cytology / Cytochemistry</b>	2 slides unfixed and unstained	≥4 slides unfixed and unstained			Room temperature Do not freeze	- Clinical data - FBC	
<b>Immunophenotyping</b>	1 EDTA tube (or 1 heparin tube) 2 slides unfixed and unstained	2 ml in EDTA (or heparin) 2 slides unfixed and unstained			Room temperature Do not freeze	- Clinical data - FBC	
<b>Conventional cytogenetics : Haematological karyotyping</b>	5ml 1 lithium heparin tube	2-5ml 1 heparin medullary puncture transferred to 1 lithium heparin tube	Vial with sterile culture medium	Biological fluid	Room temperature Do not freeze		B8-INTGB Malignant blood disorders  +
<b>Molecular cytogenetics : FISH</b>	5ml 1 lithium heparin tube	2-5ml 1 heparin medullary puncture transferred to 1 lithium heparin tube	Vial with sterile culture medium	FISH also available on: unstained slides (peripheral blood or bone marrow smear) paraffin embedded lymph nodes No analysis from bone marrow biopsy	Room temperature Do not freeze	- Clinical data - FBC - Bone marrow report - Immunophenotyping report	BW12-INTGB Fish request form for Malignant Hemopathies and Solid Tumors
<b>Molecular biology</b>	Whole blood 2 EDTA tubes	Bone marrow transferred to 1 EDTA tube			Room temperature Do not freeze		

All the preanalytical information can be found on [www.eurofins-biomnis.com](http://www.eurofins-biomnis.com) > Test Guide



Biomnis



**Pathological diagnosis  
and follow up of patients with**

**Mature Lymphoid Neoplasms**

### References

\*Swerdlow SH, Campo E, Harris NL, Jaffe ES, Pileri SA, Stein H, Thiele J  
WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (Revised 4<sup>th</sup> edition)  
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