PROTEIN BIOTECHNOLOGIES

HUMAN LEUKEMIA BONE MARROW LYSATE

Catalog Number:

Extraction 1, soluble protein fraction

T18-006-T-1	**Human leukemia bone marrow lysate**	100 µg

Extraction 2, insoluble protein fraction

T18-006-T-2	**Human leukemia bone marrow lysate**	100 µg

Diagnosis: Precursor B-cell acute lymphoblastic leukemia.

Sex / Age: Female, age 17.

Concentration: 1 mg/ml, 100 µg/vial.

The vial is provided with a 10% overfill. Maximum recovery can be obtained by centrifuging the vial briefly to collect any solution on the cap and tube sides.

Storage: Aliquot single use volumes to avoid repeated freeze/thaw cycles.
From time of receipt, this product is stable for 3 months at –20°C, or 12 months at –70°C.

Lysate Preparation: Tissue specimens are homogenized in modified RIPA buffer to obtain the soluble proteins, and centrifuged to clarify. The pellet was further extracted with a second buffer to obtain the less soluble protein fraction. The lysate solution may appear turbid at cold temperatures due to insolubility of buffer components. The solution should clear upon warming to room temperature.

Extraction 1:	PBS, pH 7.4	1 µg/ml Aprotinin	1 mM NaF
Modified RIPA Buffer:	1 mM EDTA	1 µg/ml Pepstatin-A	0.1% SDS
	0.25% Na deoxycholate	1 µg/ml Leupeptin	1 mM PMSF
	1 mM Na_3VO_4		

Extraction 2: PBS, pH 7.4, 5.0 M Urea, 2.0 M Thiourea, 50mM DTT, 0.1% SDS

Application: These lysates have not been subjected to denaturing or reducing conditions. This allows the tissue or cell lysate to be used in a variety of applications; to study protein-protein interaction, ligand binding, ELISA, immunoprecipitation, 1D and 2D gel electrophoresis, and Western blotting for the detection of specific protein targets. For use in 1D and 2D gel electrophoresis, the addition of a denaturing gel loading buffer with reducing agents may be required.

Buffer requirements for performing protein-protein interaction and ligand binding studies can vary significantly from RIPA buffer and may require modifications. In most cases, tissue lysates in RIPA buffer can be used, directly in standard ELISA and immunoprecipitation assays.

This material has tested negative for HbsAg, HIV 1/2, and HCV. Use *UNIVERSAL PRECAUTIONS* when handling. Human tissue derivatives must be treated as a potentially infectious agent and disposed of appropriately.

Source: Integrated Laboratory Services-Biotech (ILSbio), Chestertown, MD 21620 www.ilsbio.com
ILS-26436

For Research Use Only

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PATHOLOGY REPORT

Catalog No. T18-006

Tissue: Bone marrow

Location: Posterior iliac crest

Diagnosis: Precursor B-Cell acute lymphoblastic leukemia

Sex: Female

Age: 17 years

Hematology:

Leukocyte (WBC)	18.06 x 10^9 / L	Erythrocyte (RBC)	1.4 x 10^{12} / L
Lymphocyte		Hemoglobin	3.8 g/dl
Neutrophil		Hematocrit (PCV)	12%
Eosinophil		Platelets	81 x 10^9 / L
Basophil		Blasts	
Monocyte			

Biochemistry:

LDH:	not done	Sodium (Na):	not done
Serum albumin:	not done	Potassium (K):	not done
Beta microglobulins:	not done	Chloride (Cl):	not done
Creatinin:	not done	Calcium (Ca):	not done
Creatinin clearance:	not done	Bicarbonate:	not done
Albuminuria:	not done	Glycemia:	not done

Microscopic appearance: Hypochromic anisocytosis, poikilo, polychromasia, pancytopenia.
Cellularity >90%. Hematopoietic tissues are markedly suppressed.
Marrow is diffusely infiltrated with blasts, which are small to medium sized. High N/C ratio.
Scanty pale cytoplasm with regular cellular outlined open nuclear chromatin with inconspicuous nucleoli. No granuloma or excessive fibrosis seen. Reticulin grade 0.

Biological markers:

B cell marker:	CD79a (+)
T cell marker:	CD10 (+)
Other markers:	PAS block positive in blasts.
TdT:	Positive
Myeloperoxidase:	Positive in blasts.
Nonspecific esterase:	
Black Soudan:	

Comments:

Cytogenetics:

Immunohistochemistry:

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