HUMAN LEUKEMIA BONE MARROW LYSATE

Catalog Number:  

**Extraction 1, soluble protein fraction**  
T18-020-T-1  Human leukemia bone marrow lysate  100 µg

**Extraction 2, insoluble protein fraction**  
T18-020-T-2  Human leukemia bone marrow lysate  100 µg

Diagnosis:  
Chronic myeloid leukemia.

Sex / Age:  
Male, age 16.

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 Na₃VO₄

**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-23992

For Research Use Only
PATHOLOGY REPORT

Catalog No. T18-020

Tissue: Bone marrow

Location: Posterior iliac crest

Diagnosis: Chronic myeloid leukemia

Sex: Male

Age: 16 years

Hematology:

- Leukocyte (WBC) 403.97 x 10^9 / L
- Lymphocyte 2% Erythrocyte (RBC) 3.13 x 10^{12} / L
- Neutrophil 26% Hemoglobin 8.7 g/dl
- Eosinophil 4% Hematocrit (PCV) 25%
- Basophil 5% Platelets 306 x 10^9 / L
- Monocyte 13% Blasts 3%
- Myelocytes and metamyelocytes 49%

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: Hypercellular marrow 95-100% cellularity for age. Shows predominance of myeloid cells with differentiation and maturation in a fibrotic background. Megakaryocytes are increased, forming sheet. No abnormal infiltration of immature cells seen in the section examined. Erythropoiesis is decreased.

Biological markers:

- B cell marker: PAS Reticuli-Grade 3
- T cell marker: Myeloperoxidase
- Other markers: Nonspecific esterase
- TdT: Black Soudan

Comments:

Cytogenetics:

Immunohistochemistry: