

TECHNICAL DATA SHEET

Recombinant Human FLT3 Ligand (Carrier-free)

Catalog Number: 21-8513

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human FLT3 Ligand (Carrier-free)

DESCRIPTION

Human FLT3 ligand acts upon hematopoietic precursors including stem cells. Human FLT3 ligand, along with other Colony Stimulating Factors such as G-CSF or GM-CSF, have critical functions in early B cell lineage differentiation as well as expansion of monocytes and immature dendritic cells. FLT3 ligand is a class III receptor tyrosine kinase that is involved in apoptosis, proliferation, and differentiation of hematopoietic cells in bone marrow.

MOLECULAR MASS

Recombinant Human FLT3 Ligand is a soluble 17.6 kDa protein composed of 155 amino acid residues.

AMINO ACID SEQUENCE

TQDCSFQHSPLISSDFAVKIR ELSDYLLQDY PVTVASNLQD EELCGGLWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIHFVTKCAFQPP PSCLRFVQTN ISRLLQETSE QLVALKPWIT RQNFSCRLEL QCQPDSSTLP PPWSPRPLEA TAPTA

SOURCE

E. Coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Monkey, Mouse, Rat

BIOACTIVITY

The ED₅₀ was determined by the dose-dependent stimulation of the proliferation of human AML5 cells is ≤1.0 ng/ml, corresponding to a specific activity of ≥1 x 10⁶ units/mg.

RESEARCH AREAS

Cancer; Cell Culture; Immune System; Proliferation; Stem Cells & Differentiation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Pulendran B, J Banchereau and S Burkeholder 2000 J Immunol 165: 566-572. Steinman RM 1991 Annu Rev Immunol 9: 271. Pulendran B, JL Smith, G Caspary, K Brasel, D Pettit, E Maraskovsky and C Maliszewski 1999 Proc Natl Acad Sci USA 96: 1036. Shurin MR, P Pandharipande, TD Zorina, C Haluszczak, VM Subbotin, O Hunter, A Brumfield, WJ Storkus, E Maraskovsky and MT Lotze 1997 Cell Immunol 179: 17. Shortman K and SH Naik 2006 Nature Rev Immunol 7: 19.

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