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Datasheet for 009-F01-U86-0010

rHuman Flt-3 Ligand Protein

Overview

Description:	Human Flt-3 Ligand Recombinant Protein (Animal Free) - 009-F01-U86-0010
Item No.:	009-F01-U86-0010
Size:	10 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	FMS-related Tyrosine Kinase 3 Ligand (FLT-3 Ligand) is a growth factor important for the proliferation of hematopoietic cells. FLT-3 Ligand binds to, and transmits signals through, the receptor tyrosine kinase known as FMS-like Tyrosine Kinase-3 (FLT-3). FLT-3 Ligand promotes long-term expansion and differentiation of human pro-B cells in the presence of IL-7 or in combination of IL-7 and IL-3. Human FLT-3 Ligand can stimulate the proliferation of cells expressing murine FLT-3 receptors. Recombinant human FLT-3 Ligand is a non-glycosylated protein, containing 155 amino acids, with a molecular weight of 17.7 kDa.
Synonyms:	FLt3 L, Fms-related tyrosine kinase 3 ligand
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	FLT3LG
Purity/Specificity:	FMS-related Tyrosine Kinase 3 Ligand is produced with no animal-derived raw products, animal free equipment and animal free protocols. Purity was determined to be greater than 98% as determined by analysis by HPLC, UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - P49771

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Flt-3 Ligand Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti- Flt-3 Ligand in immunological assays. Buffer Formulation: 10 mM sodium phosphate and 50 mM sodium chloride, pH 7.5.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by the dose-dependent production of OCI-AML5 cell proliferation and is typically 10 ng/mL.

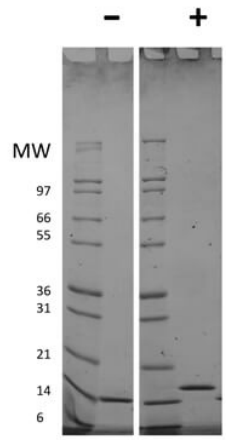
Formulation

Physical State:	Lyophilized
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	10µl (10-100µl)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

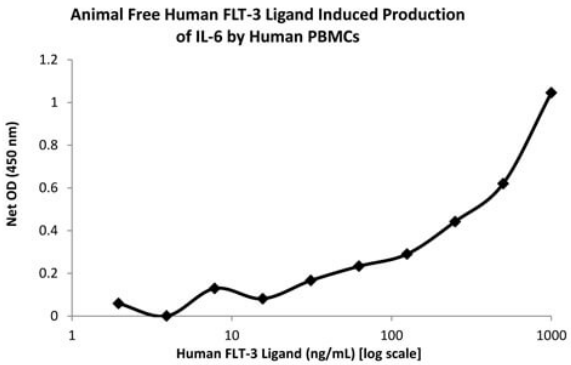
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of Human FLT-3 Animal Free Ligand Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Human FLT-3 Ligand AF in non-reducing conditions (-). Lane 3: Molecular weight marker. Lane 4: 1 µg Human FLT-3 Ligand AF in reducing conditions (+). Human FLT-3 Ligand AF has a predicted MW of 17.6 kDa.



SDS-PAGE

Bioactivity of Human FLT-3 Ligand Animal Free Recombinant Protein. Serial dilutions of Human FLT-3 Ligand, starting at 1000 ng/mL, were added to primary Human PBMCs. After 48 hours human IL-6 was measure via ELISA and the linear portion of the curve was us used to calculate the ED50. The ED50 of Human FLT-3 Ligand is 100-150 ng/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.