

# Human FLT3/Flk-2 Protein

Cat. No. FLT-HM230

## Description

<b>Source</b>	Recombinant Human FLT3/Flk-2 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Asn27-Asn541.
<b>Accession</b>	P36888-1
<b>Molecular Weight</b>	The protein has a predicted MW of 84.9 kDa. Due to glycosylation, the protein migrates to 100-120 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per ug by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

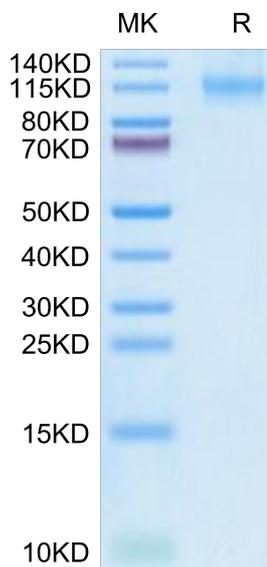
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The Flt-3 (fms-like tyrosine kinase) receptor, also named Flk-2 (fetal liver kinase) and Stk-1 (stem cell tyrosine kinase) is a member of the class III subfamily of receptor tyrosine kinases that also includes KIT, the receptor for SCF and FMS, the receptor for M-CSF. Tyrosine-protein kinase that acts as cell-surface receptor for the cytokine FLT3LG and regulates differentiation, proliferation and survival of hematopoietic progenitor cells and of dendritic cells. Promotes phosphorylation of SHC1 and AKT1, and activation of the downstream effector MTOR. Promotes activation of RAS signaling and phosphorylation of downstream kinases, including MAPK1/ERK2 and/or MAPK3/ERK1.

## Assay Data

### Bis-Tris PAGE

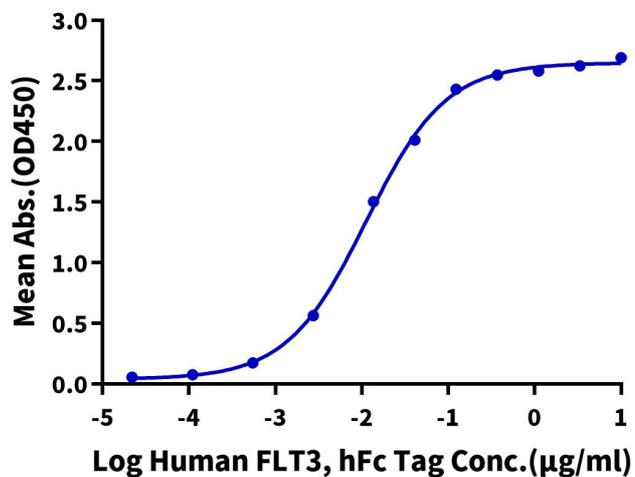


Human FLT3 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

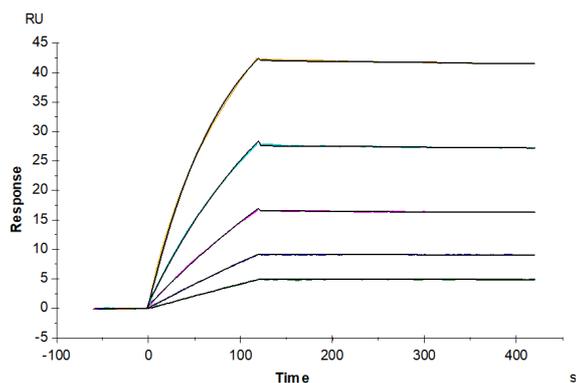
## Assay Data

## Human FLT3, hFc Tag ELISA

0.1 $\mu$ g Human FLT3 Ligand, His Tag Per Well

Immobilized Human FLT3 Ligand, His Tag at 1 $\mu$ g/ml (100 $\mu$ l/Well) on the plate. Dose response curve for Human FLT3, hFc Tag with the EC<sub>50</sub> of 13.4ng/ml determined by ELISA (QC Test).

## SPR Data



Mouse FLT3 Ligand, His Tag captured on CM5 Chip via anti-his antibody can bind Human FLT3, hFc Tag with an affinity constant of 0.18 nM as determined in SPR assay (Biacore T200).