# **Elabscience**®

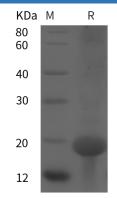
### Recombinant Human FLT3 protein (His Tag)

### Catalog Number: PDEH100918

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human FLT3 protein Arg372-Gly493, with an N-terminal His
Calculated MW	13.3 kDa
Observed MW	20 kDa
Accession	P36888
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
~	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

#### Background

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The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD135, also known as FLT-3, FLK-2, is a member of the CD system. CD135 is an important cell surface marker recognized by specific sets of antibodies to identify the types of hematopoietic (blood) progenitors in the bone marrow and it function to differentiate hematopoietic stem cells, which are CD135 negative, from multipotent progenitors, which are CD135 positive. CD135 is a receptor tyrosine kinase typeIII for the cytokine Flt3 ligand and activat signaling through second messengers by binding to Flt3. Signaling through CD135 is important for lymphocyte development. The encoding gene CD135 is a proto-oncogene to which mutations happened will lead to cancer such as leukemia.