



# Recombinant Protein Technical Manual

**Recombinant Human FLT-3/FLK-2 Protein (His Tag)(Active)**  
RPES3118

## Product Data:

**Product SKU:** RPES3118

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_004110.2

## Protein Information:

**Molecular Mass:** 59.7 kDa

**AP Molecular Mass:** 85-95 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to bind biotinylated human FLT3L-His in a functional ELISA.

**Purity:** > 85 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Receptor-Type Tyrosine-Protein Kinase FLT3; FL Cytokine Receptor; Fetal Liver Kinase-2; FLK-2; Fms-Like Tyrosine Kinase 3; FLT-3; Stem Cell Tyrosine Kinase 1; STK; CD135; FLT3; FLK2; STK1

## Immunogen Information:

**Sequence:** Met 1-Asn 541

## Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. 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 its function to differentiate hematopoietic stem cells, which are CD135 negative, from multipotent progenitors, which are CD135 positive. CD135 is a receptor tyrosine kinase type III for the cytokine Flt3 ligand and activates 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.