

# Recombinant Rhesus Macaque Fms-related Tyrosine Kinase 3 Ligand (Rhesus Macaque Flt-3 Ligand)

## Product Information

| Product Name  | Cat#      | Size   |
|---|-----------|--------|
| Recombinant Rhesus Macaque Fms-related Tyrosine Kinase 3 Ligand (Rhesus Macaque Flt-3 Ligand) | 92273ES10 | 10 µg  |
|   | 92273ES60 | 100 µg |
|   | 92273ES76 | 500 µg |

## Product Description

Flt-3 ligand (FL) is a recently identified hematopoietic cytokine whose activities are mediated by binding to the transmembrane glycoprotein Flt-3. Flt-3 was first discovered as a member of the class III subfamily of receptor tyrosine kinases (RTK) whose expression among hematopoietic cells was found to be restricted to highly enriched stem/progenitor cell populations. Additionally, class III RTKs include the receptors from SCF, M-CSF and PDGF. Not surprisingly, Flt-3 ligand is also structurally related to M-CSF and SCF. All three cytokines have been shown to exist both as type I transmembrane proteins and as soluble proteins. The predominant human FL isoform is a transmembrane protein that can undergo proteolytic cleavage to generate a soluble form of the protein. FL has been shown to synergize with a wide variety of hematopoietic cytokines to stimulate the growth and differentiation of early hematopoietic progenitors.

## Product Properties

|                            |   |
|----------------------------|---|
| <b>Synonyms</b>            | Receptor-type tyrosine-protein kinase FLT3, FL cytokine receptor  |
| <b>Accession</b>           | H9Z6V7  |
| <b>GeneID</b>              | 719239  |
| <b>Source</b>              | E.coli-derived Rhesus Macaque Fms-related Tyrosine Kinase 3 Ligand protein, Thr27-Pro185  |
| <b>Molecular Weight</b>    | Approximately 18.0 kDa.   |
| <b>AA Sequence</b>         | TQDCSFQHSPISDFAVKIRELSDYLLQDYPTVPSNLQDEELCGALWRLVLAQRWMERLKTAVG<br>SKMQGLLERVNTEIHFVTKCAFQHPSPCLRFVQTNISRLQETSEQLVAKPWITRQNFRCLELQ<br>CQPDSSTLP PPRSPGALEA TALTAPQRP  |
| <b>Tag</b>                 | None  |
| <b>Physical Appearance</b> | Sterile Filtered White lyophilized (freeze-dried) powder.   |
| <b>Purity</b>              | > 97 % by SDS-PAGE and HPLC analyses.   |
| <b>Biological Activity</b> | Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using human AML5 cells is less than 1.0 ng/ml, corresponding to a specific activity of > 1.0 × 10 <sup>6</sup> IU/mg.   |
| <b>Endotoxin</b>           | < 1.0 EU per 1µg of the protein by the LAL method.  |
| <b>Formulation</b>         | Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.   |
| <b>Reconstitution</b>      | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.<br>Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |

## **Shipping and Storage**

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

## **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!