**DESCRIPTION**

**Source**
Mouse myeloma cell line, NS0-derived human VEGFR3/Flt-4 protein

<table>
<thead>
<tr>
<th>Human Flt-4 (Tyr25-Ile776) &amp; (Ser473-Ile776) Accession # P35916</th>
<th>IEGRDM</th>
<th>Human IgG1 (Pro100-Lys330)</th>
<th>6-His tag</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N-terminus</strong></td>
<td></td>
<td><strong>C-terminus</strong></td>
<td></td>
</tr>
</tbody>
</table>

**N-terminal Sequence Analysis**
Tyr25 & Ser473

**Structure / Form**
Disulfide-linked homodimer

**Predicted Molecular Mass**
112 kDa (monomer)

**SPECIFICATIONS**

**SDS-PAGE**
145-150 kDa, 90-95 kDa and 75-80 kDa, reducing conditions

**Activity**
Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human VEGFR3/Flt-4 Fc Chimera at 5 μg/mL (100 μL/well) binds Recombinant Human VEGF-D (Catalog # 622-VD) with an apparent K_d <15 nM.

**Endotoxin Level**
<0.10 EU per 1 μg of the protein by the LAL method.

**Purity**
>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Formulation**
Lyophilized from a 0.2 μm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution**
Reconstitute at 200 μg/mL in sterile PBS.

**Shipping**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage**
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt. -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

VEGFR2 (KDR/Flik-1), VEGFR1 (Flt-1) and VEGFR3 (Flt-4) belong to the class III subfamily of receptor tyrosine kinases (RTKs). All three receptors contain seven immunoglobulin-like repeats in their extracellular domains and kinase insert domains in their intracellular regions. The expression of VEGFR1, 2, and 3 is almost exclusively restricted to the endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis.

VEGFR3 cDNA encodes a 1298 amino acid (aa) residue precursor protein with a 24 aa residue signal peptide. Mature VEGFR3 is composed of a 751 aa residue extracellular domain, a 22 aa residue transmembrane domain and a 482 aa residue cytoplasmic domain. Both VEGF-C and VEGF-D have been shown to bind and activate VEGFR3 (Flt-4). VEGFR3 is widely expressed in the early embryo but becomes restricted to lymphatic endothelia at later stages of development. It is likely that VEGFR3 may be important for lymph angiogenesis.

**References:**