

**DESCRIPTION**

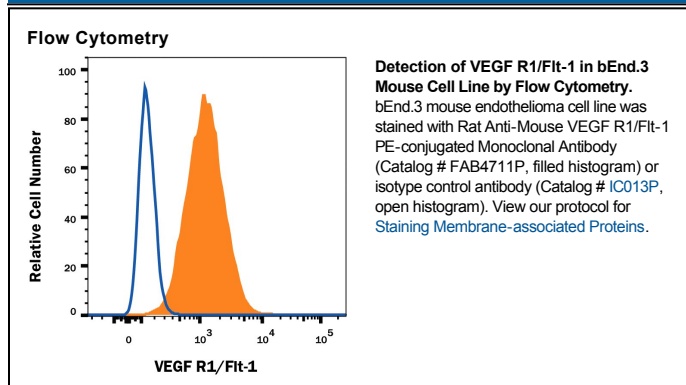
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse VEGF R1/Flt-1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human VEGF R1, recombinant mouse (rm) VEGF R2, or rmVEGF R3 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 141522
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse VEGF R1/Flt-1 Ser27-Glu759 Accession # P35969
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

**APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> ● 12 months from date of receipt, 2 to 8 °C as supplied.

**BACKGROUND**

VEGF R1 is one of the five receptor tyrosine kinases (RTKs) (VEGF R1, KDR/Flk-1, Flt-4, Tie-1, and Tek/Tie-2) whose expression is almost exclusively restricted to the endothelial cells. Tie-1 and tek/tie-2 define a new class of RTKs containing two immunoglobulin-like domains, three EGF homology domains and three fibronectin type III domains in their extracellular regions. VEGF R1/Flt-1, VEGF R2/KDR/Flk-1, VEGF R3/Flt-4 are members of the class III subfamily of RTKs containing seven immunoglobulin-like repeats in their extracellular domains. All five RTKs are likely to play central roles in vasculogenesis and angiogenesis.

Full length mouse VEGF R1 mRNA encodes a 1333 amino acid (aa) residue precursor with a predicted 22 aa residue signal peptide. Mature VEGF R1 is composed of a 737 aa residue extracellular domain, a 22 aa residue transmembrane domain and a 552 aa residue cytoplasmic domain. As a result of alternative splicing of the mRNA, a cDNA encoding a truncated form of VEGF R1, lacking the seventh immunoglobulin-like domain, the transmembrane and intracellular domains, has been cloned. The recombinant soluble VEGF R1/Fc chimera binds VEGF and PlGF with high affinity and is a potent VEGF antagonist.

**References:**

1. He, Y. *et al.* (1999) *Molecular Endocrinology* **13**:537.
2. Ferrara, N. and T. Davis-Smyth (1997) *Endocrine Reviews* **8**:4.