

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human VEGF R1 in ELISAs and Western blots. In sandwich immunoassays, less than 0.2% cross-reactivity with recombinant mouse VEGF R1, recombinant human (rh) VEGF R2, and rhVEGF R3 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human VEGF R1/Flt-1 Ser27-His687 Accession # NP_001153392
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

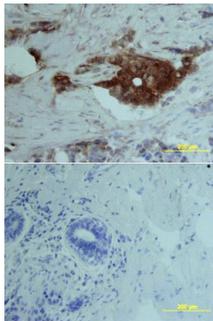
**APPLICATIONS**

**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>Western Blot</b>	0.1 µg/mL	Recombinant Human VEGF R1/Flt-1 Fc Chimera (Catalog # 321-FL)
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

**DATA**

**Immunohistochemistry**



**VEGF R1/Flt-1 in Human Breast.** VEGF R1/Flt-1 was detected in immersion fixed paraffin-embedded sections of human breast array using Human VEGF R1/Flt-1 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF321) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

VEGF R1 is one of the five receptor tyrosine kinases (RTKs) (Flt-1, 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. Flt-1, KDR/Flk-1 and 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.

The Flt-1 gene has been localized to chromosome 13q12. Full length Flt-1 mRNA encodes a 1338 amino acid (aa) residue precursor with a 22 aa residue signal peptide. Mature Flt-1 is composed of a 736 aa residue extracellular domain, a 22 aa residue transmembrane domain and a 558 aa residue cytoplasmic domain. As a result of alternative splicing of the mRNA, a cDNA encoding a truncated form of Flt-1, lacking the seventh immunoglobulin-like domain, the transmembrane and intracellular domains, has been cloned.