

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human VEGF R1/Flt-1 in direct ELISAs and Western blots. In direct ELISAs, this antibody shows approximately 20% cross-reactivity with recombinant mouse VEGF R1 and less than 10% cross-reactivity with recombinant human (rh) VEGF R2 and rhVEGF R3.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human VEGF R1/Flt-1 Ser27-His687 Accession # NP_001153392
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

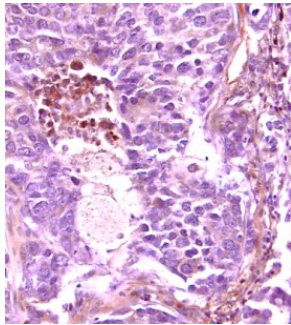
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human VEGF R1/Flt-1 Fc Chimera (Catalog # 321-FL)
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	HUVEC human umbilical vein endothelial cells
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Blockade of Receptor-ligand Interaction</b>	In a functional ELISA, 1-4 µg/mL of this antibody will block 50% of the binding of 2 ng/mL of Recombinant Human PlGF (Catalog # 264-PG) to immobilized Recombinant Human VEGF R1/Flt-1 Fc Chimera (Catalog # 321-FL) coated at 1 µg/mL (100 µL/well). At 30 µg/mL, this antibody will block >90% of the binding.	

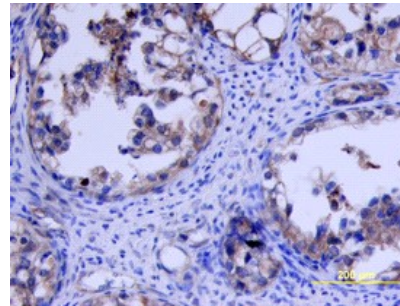
## DATA

### Immunohistochemistry



**VEGF R1/Flt-1 in Human Breast Cancer Tissue.** VEGF R1/Flt-1 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using 15 µg/mL Human VEGF R1/Flt-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF321) overnight at 4 °C. Tissue was stained (red) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

### Immunohistochemistry



**VEGF R1/Flt-1 in Human Ovarian Cancer Tissue.** VEGF R1/Flt-1 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Human VEGF R1/Flt-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF321) at 3 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). 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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<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

Vascular Endothelial Growth Factor Receptor 1 (VEGF R1) is a receptor tyrosine kinase that is expressed primarily on endothelial cells and plays a role in vasculogenesis and angiogenesis. A soluble variant of VEGF R1 was also reported to bind VEGF and PlGF with high affinity and function as a potent VEGF antagonist.