

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Mouse                                                                                                 |
| <b>Specificity</b>                                                                                                                                                                                      | Detects mouse VEGFR1/Flt-1 in ELISAs and Western blots.                                               |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                                   |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                             |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant mouse VEGFR1/Flt-1 Ser27-Glu759<br>Accession # P35969 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                       |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                          |
| *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>CyTOF-ready</b>                             | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA Capture (Matched Antibody Pair)</b>   | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA Detection (Matched Antibody Pair)</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Neutralization</b>                          | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>                            | Optimal dilution of this antibody should be experimentally determined. |
| <b>Blockade of Receptor-ligand Interaction</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Flow Cytometry</b>                          | Optimal dilution of this antibody should be experimentally determined. |

## 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> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

VEGFR1 is one of the five receptor tyrosine kinases (RTKs) (VEGFR1, 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. VEGFR1/Flt-1, VEGFR2/KDR/Flk-1, VEGFR3/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 VEGFR1 mRNA encodes a 1333 amino acid (aa) residue precursor with a predicted 22 aa residue signal peptide. Mature VEGFR1 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 VEGFR1, lacking the seventh immunoglobulin-like domain, the transmembrane and intracellular domains, has been cloned. The recombinant soluble VEGFR1/Fc chimera binds VEGF and PlGF with high affinity and is a potent VEGF antagonist.

## PRODUCT SPECIFIC NOTICES

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