

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse VEGFR2 in direct ELISAs and Western blots. Does not cross-react with recombinant mouse (rm) VEGFR1 (Flt-1), recombinant human VEGFR2 (KDR), or rmVEGFR3 (Flt-4).
Source	Monoclonal Rat IgG ₁ Clone # 91201
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse VEGFR2 Ala20-Glu762 Accession # P35918
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

VEGFR2 (KDR/Flk-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.

Mouse VEGFR2 cDNA encodes a 1367 amino acid (aa) residue precursor protein with a 19 aa residue signal peptide. Mature VEGFR2 is composed of a 743 aa residue extracellular domain, a 22 aa residue transmembrane domain and a 583 aa residue cytoplasmic domain. In contrast to VEGFR1 which binds both PlGF and VEGF with high affinity, VEGFR2 binds VEGF but not PlGF with high affinity. The recombinant soluble VEGFR2/Fc chimera binds VEGF with high affinity and is a potent VEGF antagonist.

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