

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects a synthetic peptide specific for mouse VEGFR2/KDR/Fik-1 around amino acid 1300 in Direct ELISA.
Source	Monoclonal Rat IgG ₁ Clone # 1101806
Purification	Protein A or G purified from ascites
Immunogen	Synthetic Peptide Accession # P35918
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.

Immunohistochemistry 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/Fik-1), VEGFR1 (Fit-1) and VEGFR3 (Fit-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 endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis. Mature mouse VEGFR2 is composed of a 743 amino acid (aa) extracellular domain, a 22 aa transmembrane domain, and a 583 aa cytoplasmic domain. In contrast to VEGFR1 which binds both PIGF and VEGF with high affinity, VEGFR2 binds VEGF but not PIGF with high affinity.

References:

1. Ferra, N. and R. Davis-Smyth (1997) *Endocrine Reviews* **18**:4.
2. Achen, M.G. *et al.* (1998) *Proc. Natl. Acad. Sci. USA* **95**:548.

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