

DM3523B**Monoclonal Antibody to CD309 / VEGFR-2 / Flk-1 - Biotin****Alternate names:**

FLK1, KDR, Kinase NYK, Kinase insert domain receptor, Protein-tyrosine kinase receptor Flk-1, VEGF Receptor 2, VEGFR2, Vascular endothelial growth factor receptor 2

Quantity:

50 µg

Background:

VEGF receptor 2 is a member of a receptor tyrosine kinase family whose activation plays an essential role in a large number of biological processes such as embryonic development, wound healing, cell proliferation, migration and differentiation. Like other growth factor receptors, upon ligand binding VEGF receptor 2 dimerises and is autophosphorylated on multiple tyrosine residues. These sites can be involved in the regulation of kinase activity or serve as binding sites for SH2 and phosphotyrosine binding containing signalling proteins. Phosphorylation of Tyrosines 1054 and 1059 in the activation loop is required for activation of VEGF receptor 2 and its intrinsic tyrosine kinase activity. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

Uniprot ID:[P35968](#)**NCBI:**[NP_002244.1](#)**GeneID:**[3791](#)**Host / Isotype:**

Mouse / IgG1

Recommended Isotype Controls:

SM10B (for use in human samples), AM03095PU-N

Clone:

4 (2016)

Immunogen:Recombinant Human soluble extracellular KDR (D7) (110 kDa) protein (*Cat.-No* AR26018PU-N)**Format:****State:** Lyophilised purified IgG fraction**Purification:** Affinity Chromatography on Protein G**Buffer System:** PBS**Preservatives:** 0.02% Sodium Azide**Stabilizers:** BSA (50x)**Label:** Biotin**Reconstitution:** Restore in sterile water to a concentration of 0.1-1.0 mg/ml**Applications:****ELISA:** 1-15 µg/ml.**Western blot:** 1-5 µg/ml.**Immunohistochemistry on Frozen Sections:** 6-30 µg/ml.**Immunofluorescence:** 1-2 µg/ml.**FACS analysis and cell sorting:** 2-10 µg/ml.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** The Unconjugated Monoclonal antibody will detect native Human VEGFR-2/KDR in ELISA experiments and on the surface of different Human cell types.
Species: Human.
Other species not tested.
- Storage:** Prior to reconstitution store at 2-8°C.
Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.
- General Readings:**
1. Shibata et al, BMC Medicine 8 (2010).
 2. Albuquerque et al, Nature Med 2009).
 3. Ebos et al, Mol Cancer Res 2 (2004).
 4. Ebos et al, Cancer res 68 (2008).