

Cat. No: MAB-94234
Conjugate: Unconjugated
Size: 100 ug
Clone: D5A6
Concentration: 1mg/ml
Host: Rb
Isotype: IgG
Reactivity: H M
Applications: WB 1:1000
Molecular Weight: 230 kDa

Purification: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr1059 of human VEGF Receptor 2.

Background: Vascular endothelial growth factor receptor 2 (VEGFR2, KDR, Flk-1) is a major receptor for VEGF-induced signaling in endothelial cells. Upon ligand binding, VEGFR2 undergoes autophosphorylation and becomes activated (1). Major autophosphorylation sites of VEGFR2 are located in the kinase insert domain (Tyr951/996) and in the tyrosine kinase catalytic domain (Tyr1054/1059) (2). Activation of the receptor leads to rapid recruitment of adaptor proteins, including Shc, GRB2, PI3 kinase, NCK, and the protein tyrosine phosphatases SHP-1 and SHP-2 (3). Phosphorylation at Tyr1212 provides a docking site for GRB2 binding and phospho-Tyr1175 binds the p85 subunit of PI3 kinase and PLCγ, as well as Shb (1,4,5). Signaling from VEGFR2 is necessary for the execution of VEGF-stimulated proliferation, chemotaxis and sprouting, as well as survival of cultured endothelial cells in vitro and angiogenesis in vivo (6-8). Phospho-VEGF Receptor 2 (Tyr1059) (D5A6) Rabbit mAb only detects endogenous levels of VEGFR 2 proteins when phosphorylated at Tyr1059.

Form: liquid
Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.4
Storage: Store at -20°C. Avoid freeze / thaw cycles

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