
Product name:	Phospho-VEGFR2-Y1059
Cat number:	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.
Form:	liquid
Buffer:	PBS with 0.02% sodium azide,50% glycerol,pH7.4
Storage:	Store at -20°C. Avoid freeze / thaw cycles
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 PLC γ , as well as Shb (1,4,5). Signaling from VEGFR2 is necessary for the execution of VEGFstimulated 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.