Product Data Sheet: Phospho-VEGFR2-Y996

Cat. No:	ABP-0595
Conjugate:	Unconjugated
Size:	100 ug
Clone:	Poly
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu
Applications:	WB 1:1000
Molecular Weight:	230 kDa
Purification:	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding tyrosine 996 of human VEGFR 2 protein
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 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 (Tyr996) Antibody detects endogenous levels of VEGFR-2 proteins only when phosphorylated at tyrosine 996.
Form:	liquid
Buffer:	PBS with 0.02% sodium azide,50% glycerol,pH7.4
Storage:	Store at -20℃. Avoid freeze / thaw cycles

References

(1) Meyer, M. et al. (1999) EMBO J 18, 363-74. (2) Dougher-Vermazen, M. et al. (1994) Biochem Biophys Res Commun 205, 728-38. (3) Kroll, J. and Waltenberger, J. (1997) J Biol Chem 272, 32521-7. (4) Takahashi, T. et al. (2001) EMBO J 20, 2768-78. (5) Holmqvist, K. et al. (2004) J Biol Chem 279, 22267-75. (6) Karkkainen, M.J. and Petrova, T.V. (2000) Oncogene 19, 5598-605. (7) Rahimi, N. et al. (2000) J Biol Chem 275, 16986-92. (8) Claesson-Welsh, L. (2003) Biochem Soc Trans 31, 20-4

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