

Product Data Sheet: Phospho-VEGFR2-Y1175

Cat. No: ABP-0382

Conjugate: Unconjugated

Size: 100 ug Clone: Poly **Concentration:** 1mg/ml

Host: Rb

Isotype: **IgG**

Reactivity: Hu, Ms, Rt

Western Blotting 1:1000 IHC 1:50 - 1:100 IF 1:100 - 1:200 **Applications:**

Molecular Weight:

Polyclonal antibodies are produced by immunizing animals with a synthetic **Purification:**

phosphopeptide corresponding to residues surrounding tyrosine 1175 of human

VEGFR 2 protein.

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

Background: SHP-2 (3). Phosphorylation at Tyr1212 provides a docking site for GRB2 binding

and phospho-Tyr1175 binds the p85 subunit of PI3 kinase and PLCy, as well as

Shb (1,4,5). Signaling from VEGFR2 is necessary for the execution of

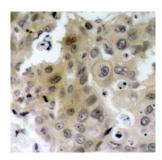
VEGFstimulated proliferation, chemotaxis and sprouting, as well as survival of cultured endothelial cells in vitro and angiogenesis in vivo (6-8). Phospho-VEGF Receptor-2 (Tyr1175) Antibody detects endogenous levels of VEGFR-2 proteins

only when phosphorylated at tyrosine 1175

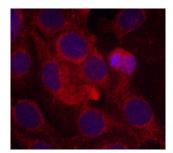
Form: liquid

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3

Storage: Store at -20°C. Avoid freeze / thaw cycles



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Phospho-VEGFR 2 (Tyr1175) antibody.



Immunofluorescence staining of methanol-fixed MCF cells using Phospho-VEGFR 2 (Tyr1175) antibody.



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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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