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Phospho-VEGF Receptor 2 Antibody Sampler Kit



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1 Kit (5 x 20 microliters)

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For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Phospho-VEGF Receptor 2 (Tyr951) (15D2) Rabbit mAb	4991	20 µl	230 kDa	Rabbit IgG
Phospho-VEGF Receptor 2 (Tyr996) Antibody	2474	20 µl	230 kDa	Rabbit
Phospho-VEGF Receptor 2 (Tyr1059) (D5A6) Rabbit mAb	3817	20 µl	230 kDa	Rabbit IgG
Phospho-VEGF Receptor 2 (Tyr1175) (D5B11) Rabbit mAb	3770	20 µl	230 kDa	Rabbit IgG
VEGF Receptor 2 (D5B1) Rabbit mAb	9698	20 µl	210, 230 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Phospho-VEGF Receptor 2 Antibody Sampler Kit provides an economical means of evaluating the VEGFR2 tyrosine kinase and several phosphorylation sites that are involved in its activation. The kit includes enough antibody to perform two western blot experiments with each primary antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

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 VEGF-stimulated proliferation, chemotaxis and sprouting, as well as survival of cultured endothelial cells *in vitro* and angiogenesis *in vivo* (6-8).

Background 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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