SignalChem
Specialists in Signaling Proteins
1-866-9 KINASE (54-6273)

Catalogue #	Aliquot Size
K01-65R-100	100 µg

Anti-phospho-KDR (Tyr951)

Rabbit Polyclonal Antibody

Catalog # K01-65R

Lot # J1178-15

Cited Applications

WB, IHC

Suggested Dilutions:
WB: 1:500-1:1000 IHC: 1:50-1:100

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes the KDR protein phosphorylated at tyrosine 951

Cross Reactivity

Human and Mouse

Host/Isotype/Clone#

Rabbit, IgG

Immunogen

Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr951

Formulation

PBS (pH 7.4) 150mM NaCl, 0.02% sodium azide and 50% glycerol.

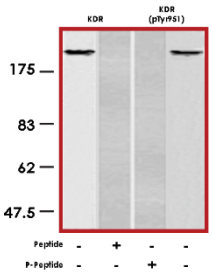
Scientific Background

Kinase insert domain receptor (KDR or VEGFR) is a growth factor receptor tyrosine kinase that plays a pivotal role in endothelial cell proliferation and differentiation. KDR binds VEGF with high affinity and this interaction is implicated in angiogenesis (1). The expression levels of VEGF and KDR are highly correlated during the normal development of the ocular vasculature in humans (1). Induction of angiogenesis is a critical step in tumor progression, and inhibitors of KDR have been demonstrated both to promote tumor regression and reduce metastatic potential in preclinical studies (2). Autophosphorylation of KDR occurs at Tyr951, Tyr996, Tyr1054 and Tyr1059 and phosphorylation at Tyr1214 is associated with interactions with downstream effector molecules (3).

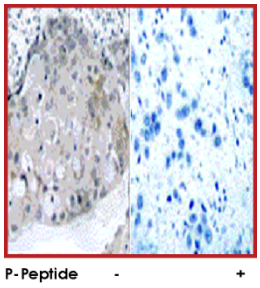
References

1. Neufeld, G. et al: Vascular endothelial growth factor (VEGF) and its receptors. FASEB J. 1999 Jan;13(1):9-22.
2. Zhu, Z. et al: Inhibition of tumor growth and metastasis by targeting tumor-associated angiogenesis with antagonists to the receptors of vascular endothelial growth factor. Invest New Drugs. 1999;17(3):195-212.
3. Lamalice L. et al: Phosphorylation of Tyr1214 within VEGFR-2 triggers the recruitment of Nck and activation of Fyn leading to SAPK2/p38 activation and endothelial cell migration in response to VEGF. J Biol Chem. 2006 Nov 10;281(45):34009-20.

Sample Data



Western blot analysis of extracts from human breast carcinoma cells anti-phospho-KDR (Tyr951) antibody.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-phospho-KDR (Tyr951) antibody.

Anti-phospho-KDR (Tyr951)

Rabbit Polyclonal Antibody

Catalog Number	K01-65R
Specific Lot Number	J1178-15
Purification	Affinity chromatography
Stability	1yr at –20°C from date of shipment
Storage & Shipping	Store product at –20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
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