VEGFR3 Antibody

Catalog No: #21410

Package Size: #21410-1 50ul #21410-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

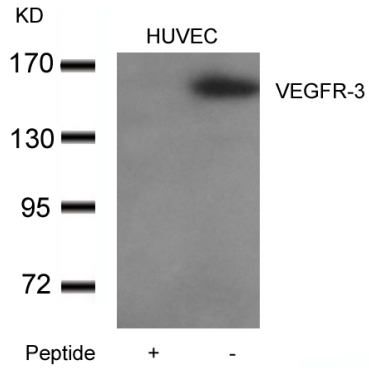
Product Name	VEGFR3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total VEGFR-3 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.1279~1283 (L-A-S-E-E) derived from Human VEGFR-3.
Target Name	VEGFR3
Other Names	PCL; FLT4; FLT41; LMPH1A;
Accession No.	Swiss-Prot: P35916 NCBI Protein: NP_002011.2
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

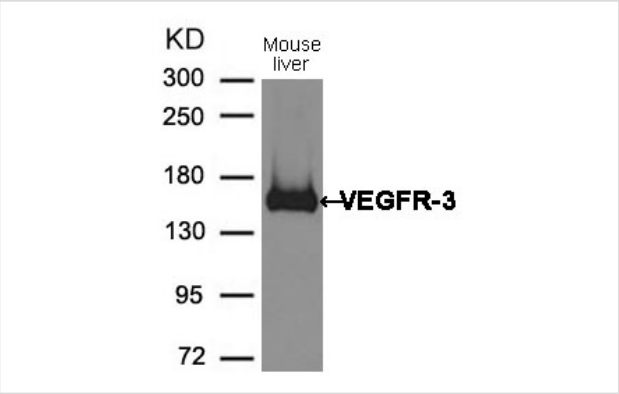
Predicted MW: 160kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from HUVEC cells using VEGFR-3 Antibody #21410 (right) and the same antibody preincubated with blocking peptide #61410 (left).



Western blot analysis of extracts from Mouse liver tissue using VEGFR-3 Antibody #21410.

Background

Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFC and VEGFD, and plays an essential role in adult lymphangiogenesis and in the development of the vascular network and the cardiovascular system during embryonic development. Promotes proliferation, survival and migration of endothelial cells, and regulates angiogenic sprouting. Signaling by activated FLT4 leads to enhanced production of VEGFC, and to a lesser degree VEGFA, thereby creating a positive feedback loop that enhances FLT4 signaling. Modulates KDR signaling by forming heterodimers. The secreted isoform 3 may function as a decoy receptor for VEGFC and/or VEGFD and play an important role as a negative regulator of VEGFC-mediated lymphangiogenesis and angiogenesis. Binding of vascular growth factors to isoform 1 or isoform 2 leads to the activation of several signaling cascades; isoform 2 seems to be less efficient in signal transduction, because it has a truncated C-terminus and therefore lacks several phosphorylation sites. Mediates activation of the MAPK1/ERK2, MAPK3/ERK1 signaling pathway, of MAPK8 and the JUN signaling pathway, and of the AKT1 signaling pathway. Phosphorylates SHC1. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Promotes phosphorylation of MAPK8 at 'Thr-183' and 'Tyr-185', and of AKT1 at 'Ser-473'.

Wang J.F., Zhang X., Groopman J.E.J. Biol. Chem. 279:27088-27097(2004)

Matsuura M., Onimaru M., Yonemitsu Y., Suzuki H., Nakano T., Ishibashi H., Shirasuna K., Sueishi K.Am. J. Pathol. 175:1709-1721(2009)

Galvagni F., Pennacchini S., Salameh A., Rocchigiani M., Neri F., Orlandini M., Petraglia F., Gotta S., Sardone G.L., Matteucci G., Terstappen G.C., Oliviero S. Circ. Res. 106:1839-1848(2010)

Published Papers

el at., Culture Medium of Bone Marrow-Derived Human Mesenchymal Stem Cells Effects Lymphatic Endothelial Cells and Tumor Lymph Vessel Formation.In Oncol Lett on 2015 Mar by Jie Zhan , Yahong Li et al..PMID: 25663886, , (2015)

PMID:25663886

Note: This product is for in vitro research use only and is not intended for use in humans or animals.