



Datasheet for ABIN6256627

anti-VEGFR2/CD309 antibody (pTyr1214)



[Go to Product page](#)

4 Images

Overview

Quantity:	100 µL
Target:	VEGFR2/CD309 (VEGFR2)
Binding Specificity:	pTyr1214
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This VEGFR2/CD309 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human VEGFR2 around the phosphorylation site of Tyr1214.
Isotype:	IgG
Specificity:	Phospho-VEGFR2 (Tyr1214) Antibody detects endogenous levels of VEGFR2 only when phosphorylated at Tyrosine 1214.
Predicted Reactivity:	Pig,Zebrafish,Bovine,Sheep,Rabbit,Dog,Xenopus
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

Target Details

Target: VEGFR2/CD309 (VEGFR2)

Alternative Name: KDR ([VEGFR2 Products](#))

Background: Description: Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFC and VEGFD. Plays an essential role in the regulation of angiogenesis, vascular development, vascular permeability, and embryonic hematopoiesis. Promotes proliferation, survival, migration and differentiation of endothelial cells. Promotes reorganization of the actin cytoskeleton. Isoforms lacking a transmembrane domain, such as isoform 2 and isoform 3, may function as decoy receptors for VEGFA, VEGFC and/or VEGFD. Isoform 2 plays an important role as negative regulator of VEGFA- and VEGFC-mediated lymphangiogenesis by limiting the amount of free VEGFA and/or VEGFC and preventing their binding to FLT4. Modulates FLT1 and FLT4 signaling by forming heterodimers. Binding of vascular growth factors to isoform 1 leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, reorganization of the actin cytoskeleton and activation of PTK2/FAK1. Required for VEGFA-mediated induction of NOS2 and NOS3, leading to the production of the signaling molecule nitric oxide (NO) by endothelial cells. Phosphorylates PLCG1. Promotes phosphorylation of FYN, NCK1, NOS3, PIK3R1, PTK2/FAK1 and SRC.

Gene: KDR

Molecular Weight: 152kDa

Gene ID: 3791

UniProt: [P35968](#)

Pathways: [RTK Signaling](#), [Glycosaminoglycan Metabolic Process](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Growth Factor Binding](#), [Regulation of long-term Neuronal Synaptic Plasticity](#), [VEGF Signaling](#)

Application Details

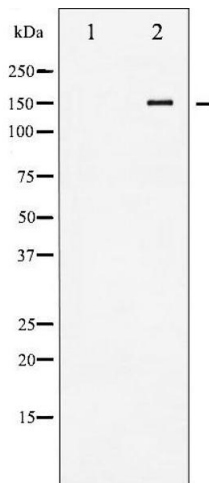
Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

Handling

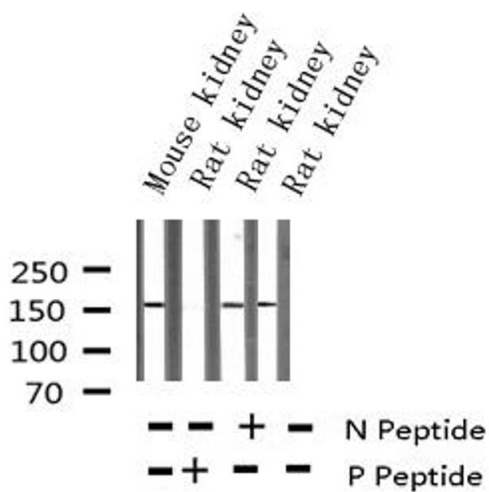
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



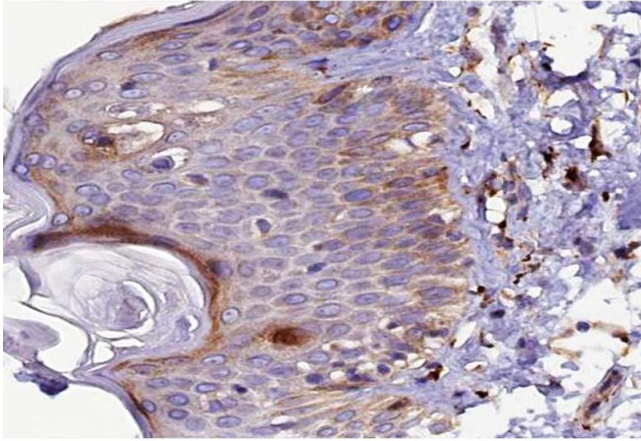
Western Blotting

Image 1. Western blot analysis of VEGFR2 phosphorylation expression in Na₃VO₄ treated HepG2 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



Western Blotting

Image 2. Western blot analysis of Phospho-VEGFR2 (Tyr1214) expression in various lysates



Immunohistochemistry

Image 3. ABIN6267491 at 1/100 staining human Skin cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6256627.