

Datasheet for ABIN6256614

anti-VEGFR2/CD309 antibody (pTyr1059)**3** Images[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	VEGFR2/CD309 (VEGFR2)
Binding Specificity:	pTyr1059
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This VEGFR2/CD309 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human VEGFR2 around the phosphorylation site of Tyr1059.
Isotype:	IgG
Specificity:	Phospho-VEGFR2 (Tyr1059) Antibody detects endogenous levels of VEGFR2 only when phosphorylated at Tyrosine 1059.
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)
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Target Details

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: 170kDa

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, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

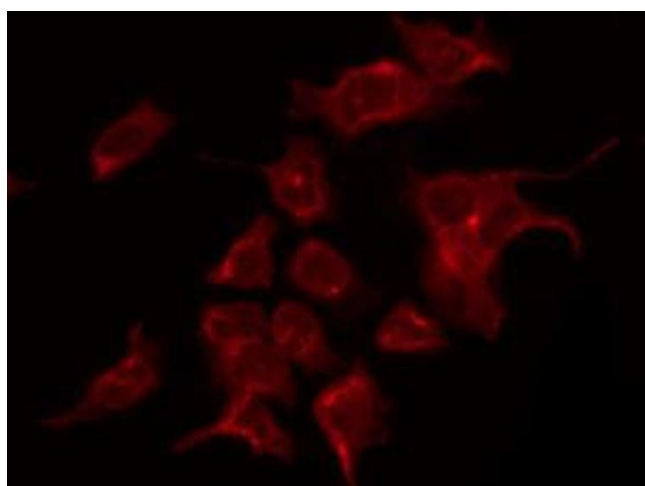
Handling

Format: Liquid

Handling

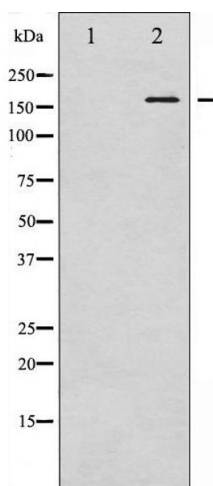
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage: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

Images



Immunofluorescence (fixed cells)

Image 1. ABIN6267490 staining K562 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



Western Blotting

Image 2. 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 3. Western blot analysis of VEGFR2 phosphorylation expression in rat muscle tissue lysates, The lane on the right is treated with the antigen-specific peptide.

