Datasheet for ABIN7321052

VEGFR2/CD309 Protein (His tag)

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1 Image

Overview

Quantity:	50 µg
Target:	VEGFR2/CD309 (VEGFR2)
Origin:	Rat
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This VEGFR2/CD309 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Rat VEGFR2/CD309/KDR Protein (His Tag)
Sequence:	Met 1-Glu 760
Characteristics:	A DNA sequence encoding the rat KDR (AAH87029.1) extracellular domain (Met 1-Glu 760) was expressed with a polyhistidine tag at the C-terminus.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method

Target Details

Target:	VEGFR2/CD309 (VEGFR2)
Alternative Name:	VEGFR2/CD309/KDR (VEGFR2 Products)
Background:	Background: VEGFR2, also called as KDR or Flk-1, is identified as the receptor for VEGF and VEGFC and an early marker for endothelial cell progenitors, whose expression is restricted to endothelial cells in vivo. VEGFR2 was shown to be the primary signal transducer for

Target Details

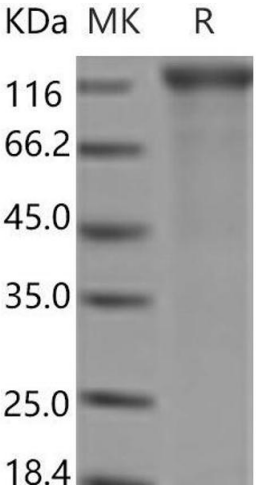
	angiogenesis and the development of pathological conditions such as cancer and diabetic retinopathy. It has been shown that VEGFR2 is expressed mainly in the endothelial cells, and the expression is upregulated in the tumor vasculature. Thus the inhibition of VEGFR2 activity and its downstream signaling are important targets for the treatment of diseases involving angiogenesis. VEGFR2 transduces the major signals for angiogenesis via its strong tyrosine kinase activity. However, unlike other representative tyrosine kinase receptors, VEGFR2 does not use the Ras pathway as a major downstream signaling but rather uses the phospholipase C-protein kinase C pathway to signal mitogen-activated protein (MAP)-kinase activation and DNA synthesis. VEGFR2 is a direct and major signal transducer for pathological angiogenesis, including cancer and diabetic retinopathy, in cooperation with many other signaling partners; thus, VEGFR2 and its downstream signaling appear to be critical targets for the suppression of these diseases. VEGF and VEGFR2-mediated survival signaling is critical to endothelial cell survival, maintenance of the vasculature and alveolar structure and regeneration of lung tissue. Reduced VEGF and VEGFR2 expression in emphysematous lungs has been linked to increased endothelial cell death and vascular regression.Immune Checkpoint Immunotherapy Cancer Immunotherapy Targeted Therapy Synonym: Vegfr-2;KDR;Flk-1
Molecular Weight:	84.3 kDa
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

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.



Western Blotting

Image 1.