Datasheet for ABIN7317118

VEGFR2/CD309 Protein (GST tag,His tag)

1 Image

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Overview

Quantity:	50 µg
Target:	VEGFR2/CD309 (VEGFR2)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This VEGFR2/CD309 protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human VEGFR2/Flk-1/KDR Protein (His &GST Tag)(Active)
Sequence:	Asp807-Val1356
Characteristics:	A DNA sequence encoding the human KDR (NP_002244) (Asp807-Val1356) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 78 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	The specific activity was determined to be 10 nmol/min/mg using Poly(Glu,Tyr) 4:1 as substrate.

Target Details

Target:	VEGFR2/CD309 (VEGFR2)

Target Details

Alternative Name:	VEGFR2/Flk-1/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 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: Vascular endothelial growth factor receptor 2; KDR; VEGFR-2; Fetal liver kinase 1; FLK-1; Kinase insert domain receptor; Protein-tyrosine kinase receptor flk-1;CD309;Flk-1;FLK1;VEGFR;VEGFR2
Molecular Weight:	89.3 kDa
NCBI Accession:	NP_002244
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

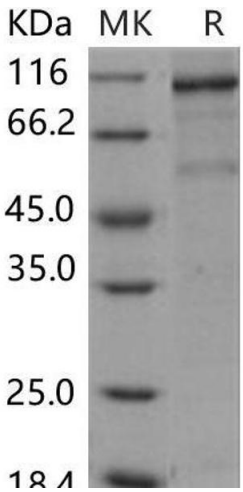
Application Details

Restrictions:	For Research Use only

Handling

Format:	Frozen, Liquid
Buffer:	Supplied as sterile 50 mM Tris, 100 mM NaCl, pH 8.0, 10 % glycerol, 2 mM GSH
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Images



Western Blotting

Image 1.