

Datasheet for ABIN1589571
VEGFR2/CD309 Protein (glycosylated, Monomer, Soluble)



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Overview

Quantity:	5 µg
Target:	VEGFR2/CD309 (VEGFR2)
Protein Characteristics:	glycosylated, Monomer, Soluble
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	VEGFR-2/Flk-1 (native), soluble
Sequence:	ASVGLTGDFL HPPKLSTQKD ILTILANTTL QITCRGQRDL DWLWPNAQRD SEERVLVTEC GGGDSIFCKT LTIPRVVGND TGAYKCSYRD VDIASVYVY VRDYRSPFIA SVSDQHGVY ITENKNKTVV IPCRGSISNL NVSLCARYPE KRFVPDGNRI SWDSEIGFTL PSYMISYAGM VFCEAKINDE TYQSIMYIVV VVGRIYDVI LSPPEIELS AGEKLVNCT ARTELNVGLD FTWHSPPSKS HHKKIVNRDV KPFPGTVAKM FLSTLTIESV TKSDQGEYTC VASSGRMIKR NRTFVRVHTK PFIAFGSGMK SLVEATVGSQ VRIPVKYLSY PAPDIKWYRN GRPIESNYTM IVGDELTIME VTERDAGNYT VILTNPISME KQSHMVSLVV NVPPQIGEKA LISPMDSYQY GTMQTLTCTV YANPPLHHIQ WYWQLEEACS YRPGQTSPYA CKEWRHVEDF QGGNKIEVTK NQYALIEGKN KTVSTLVIQA ANVSALYKCE AINKAGRGER VISFHVIRGP EITVQPAAQP TEQESVLLC TADRNTFENL TWYKLGSQLT SVHMGESLTP VCKNLDALWK LNGTMFSNST NDILIVAFQN ASLQDQGDYV CSAQDKKTKK RHCLVKQLII LGMEASLGDR IAMP
Characteristics:	Length (aa):654

Product Details

Purity: > 95 % by SDS-PAGE

Target Details

Target: VEGFR2/CD309 (VEGFR2)

Alternative Name: VEGFR-2/Flk-1 ([VEGFR2 Products](#))

Background: Disruption of the precise balance of positive and negative molecular regulators of blood and lymphatic vessel growth can lead to myriad diseases. Although dozens of natural inhibitors of hemangiogenesis have been identified, an endogenous selective inhibitor of lymphatic vessel growth has not to our knowledge been previously described. A splice variant of the gene encoding vascular endothelial growth factor receptor-2 (VEGFR-2) that encodes a secreted form of the protein, designated endogenous soluble VEGFR-2 (esVEGFR-2/KDR) has been described. The endogenous soluble esKDR inhibits developmental and reparative lymphangiogenesis by blocking VEGF-C function. Tissue-specific loss of esKDR in mice induced, at birth, spontaneous lymphatic invasion of the normally alymphatic cornea and hyperplasia of skin lymphatics without affecting blood vasculature. Administration of esKDR inhibited lymphangiogenesis but not hemangiogenesis induced by corneal suture injury or transplantation, enhanced corneal allograft survival and suppressed lymphangioma cellular proliferation. Naturally occurring esKDR thus acts as a molecular uncoupler of blood and lymphatic vessels, modulation of esKDR might have therapeutic effects in treating lymphatic vascular malformations, transplantation rejection and, potentially, tumor lymphangiogenesis and lymphedema. Recombinant human esKDR generated by alternative splicing consist of the first 6 Ig-like loops followed by the unique C-terminal end: GMEASLGDRAMP.

Synonyms: soluble vascular endothelial growth factor receptor-2, Kdr, Flk1, Ly73, Flk-1, VEGF receptor 2, VEGFR-2, sVEGFR-2

Molecular Weight: 105 kDa

Gene ID: 16542

UniProt: [P35918](#)

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: Measured by its ability to inhibit the VEGF165-induced proliferation in human umbilical vein

Application Details

	endothelial (HUVE) cells.
Comment:	Soluble Receptors
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	The lyophilized mouse sFlk-1 is soluble in water and most aqueous buffers, it should be reconstituted in water or PBS to a concentration of not lower than 100 µg/mL.
Buffer:	25 mM MES, 100 mM NaCl, pH 5.5
Storage:	4 °C, -20 °C, -80 °C
Storage Comment:	The material is stable for greater than six months at -20° C to -70° C. After the first thawing it is recommended to aliquote the material, because repeated freeze-thaw cycles will decrease the activity. Store at 4°C not longer than 2 days.
Expiry Date:	6 months