

Datasheet for ABIN616030

anti-VEGFR2/CD309 antibody (AA 20-678)**2** Images[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	VEGFR2/CD309 (VEGFR2)
Binding Specificity:	AA 20-678
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This VEGFR2/CD309 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	Highly pure (>95%) recombinant human esKDR (Ala20-Pro678) derived from insect cells
Isotype:	IgG
Specificity:	This antibody detects CD309 / VEGFR-2 / Flk-1.
Cross-Reactivity (Details):	Species reactivity (tested):Human
Purification:	Protein-A purified

Target Details

Target:	VEGFR2/CD309 (VEGFR2)
Alternative Name:	CD309 / VEGFR-2 / Flk-1 (VEGFR2 Products)
Background:	Disruption of the precise balance of positive and negative molecular regulators of blood and

Target Details

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: CGRETILDHSAEAVGMP.Synonyms: FLK1, KDR, Kinase NYK, Kinase insert domain receptor, Protein-tyrosine kinase receptor Flk-1, VEGF Receptor 2, VEGFR2, Vascular endothelial growth factor receptor 2

Gene ID:	3791
NCBI Accession:	NP_002244
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:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

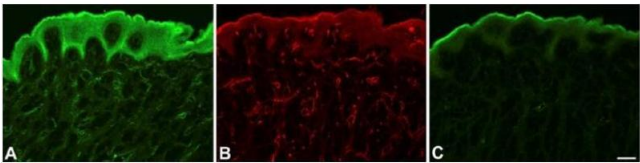
Handling

Reconstitution:	Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/mL.
Buffer:	PBS, pH 7.2

Handling

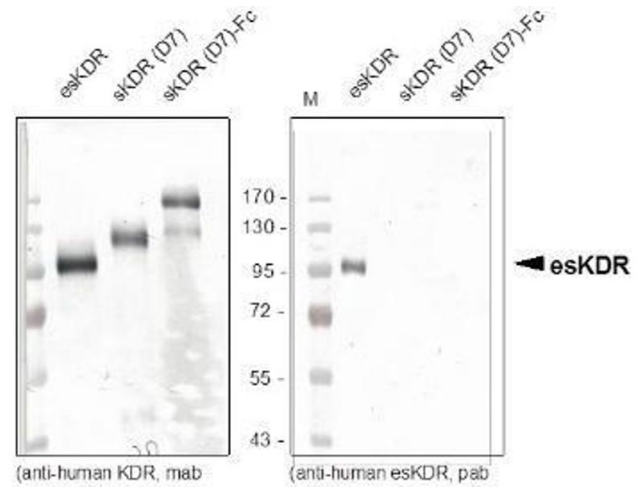
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	The lyophilized antibody is stable at room temperature for up to 1 month. Following reconstitution antibody can be stored at 2-8 °C for up to two weeks or (in aliquots) at -20 °C for longer.

Images



Immunofluorescence

Image 1. Immunofluorescence staining with consecutive sections of unfixed, human foreskin. A) Staining with anti-sVEGFR2/KDR antibodies . Note signal in epidermis and vessels. B) Staining with anti-membrane-bound VEGFR-2/KDR. Note staining in vessels. C) Negative control. Note non-specific fluorescence in the hornified layer of the epithelium. Provided by Prof. J. Wilting, Göttingen, Germany.



Western Blotting

Image 2. Western Analysis of anti-human esKDR. Samples were loaded in 10% SDS-polyacrylamide gel under reducing conditions. Left panel: monoclonal antibody against the soluble KDR D1-7); Right panel: polyclonal antibody (peptide) against against the unique C-terminal end of esKDR.