

Rat anti-Mouse VEGFR-2/Flk-1 Monoclonal Antibody | anti-VEGFR-2/Flk-1 antibody

Rat Anti-Mouse VEGFR-2/Flk-1

CATALOG # AAA79111	HOST Rat	REACTIVITY Mouse	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

VEGFR-2/Flk-1; Monoclonal Antibody; Rat Anti-Mouse VEGFR-2/Flk-1; Anti-mouse VEGFR-2/Flk-1-Biotin (#3C8); Vascular endothelial growth factor receptor 2; Protein-tyrosine kinase receptor flk-1; anti-VEGFR-2/Flk-1 antibody

PRODUCT SPECIFICATIONS

Host	Rat
Reactivity	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	IgG; 3C8
Specificity	The unconjugated antibody will detect native mouse VEGFR-2/Flk-1 in Western analysis.
Purity/Purification	Protein G purified
Form/Format	Lyophilized
Sequence Length	1367
Applicable Applications for anti-VEGFR-2/Flk-1 antibody	WB (Western Blot)
Immunogen	murine stromal cell line
Conjugation	Biotin
Preparation	Monoclonal antibodies were produced with the help of BALB/c mice using recombinant mouse soluble extracellular Flk-1 as the immunizing antigen
Buffer/Stabilizer	PBS; 50X BSA
Preservative	0.02% sodium azide
Reconstitution	Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.
Warnings	Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, this is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive condition may develop.
Preparation and Storage	The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8 degree C. Frozen aliquots are stable for at least 6 months when stored at -20 degree C.



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-VEGFR-2/Flk-1 antibody	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.
References	1. Shibata et al, BMC Medicine 8 (2010) 2. Albuquerque et al, Nature Med 2009 3. Ebos et al, Mol Cancer Res 2 (2004) 4. Ebos et al, Cancer res 68 (2008).

NCBI AND UNIPROT INFORMATION

NCBI GI #	549321
NCBI GeneID	16542
UniProt Accession #	P35918; C5H7S5
Molecular Weight	152,517 Da
NCBI Official Full Name	Vascular endothelial growth factor receptor 2
NCBI Official Synonym Full Names	kinase insert domain protein receptor
NCBI Official Symbol	Kdr
NCBI Official Synonym Symbols	Flk1; Ly73; Flk-1; Krd-1; VEGFR2; VEGFR-2; sVEGFR-2; 6130401C07
NCBI Protein Information	vascular endothelial growth factor receptor 2; kinase NYK; VEGF receptor-2; fetal liver kinase 1; protein-tyrosine kinase receptor flk-1; vascular endothelial growth factor receptor-2; vascular endothelial growth factor receptor-3; vascular endothelial growth factor receptor- 2; soluble vascular endothelial growth factor receptor 2
UniProt Protein Name	Vascular endothelial growth factor receptor 2
UniProt Gene Name	Kdr
UniProt Synonym Gene Names	Flk-1; Flk1; VEGFR-2; FLK-1
UniProt Entry Name	VGFR2_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.