

VEGFR2 / Flk-1 / KDR3 / CD309 Monoclonal Mouse Antibody (KDR657)

Product Description

CD309, also known as VEGF-R2, KDR3, and Flk-1 (mouse), is a type I transmembrane glycoprotein. It is a member of the CSF-1/PDGF receptor family of type III tyrosine kinase receptors. Human VEGF-R2 is mainly expressed by endothelial cells, embryonic tissues, and megakaryocytes. It plays an important role in the regulation of angiogenesis, vasculogenesis, and vascular permeability. The ligands of VEGF-R2 include VEGF-A, VEGF-C, VEGF-D, and VEGF splice isoforms. Ligation of VEGF-R2 with its ligands results in the receptor dimerization and auto-phosphorylation, stimulating endothelial cell proliferation and migration.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0657, Anti-CD309 (KDR657)

References

Zola H, et al. 2007. Leukocyte and Stromal Cell Molecules: The CD Markers Wiley-Liss A John Wiley & Sons Inc, Publication. | Ferrara N and Gerber HP. 2002. Acta. Haematol. 106:148. | Murohara T, et al. 1998. Circulation. 97:99

Product attributes

Antibody number	#0657
Antibody reactivity (target)	CD309, Flk-1, KDR3, VEGFR2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	KDR657
Isotype	IgG1, kappa
Molecular weight	150-230 kDa
Synonyms	CD309; Fetal liver kinase 1 (FLK-1); KDR; Kinase insert domain receptor (a type III receptor tyrosine kinase); KRD1; Ly73; Protein tyrosine kinase receptor FLK1; Protein-tyrosine kinase receptor flk-1; Vascular endothelial growth factor receptor 2
Human gene symbol	KDR
Entrez gene ID	3791
SwissProt	P35968
Unigene	479756
Immunogen	Recombinant human VEGF-R2 protein
Antibody target cellular	Plasma membrane
Species reactivity	Human
Antibody application notes	For coating for ELISA, order Ab without BSA. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry
Positive control	HUVEC cells. Human lymph nodes and tonsils.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Angiogenesis, Cancer
Cell/tissue expression	Endothelial cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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