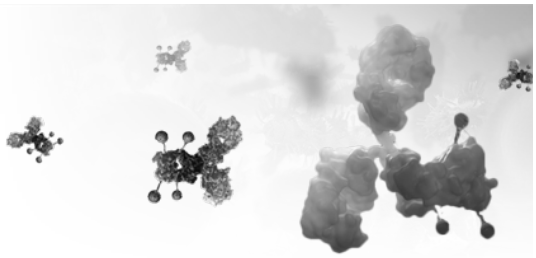

Rat Anti-Mouse VEGFR-2 Monoclonal antibody, clone DC101 (CABT-L4382)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The DC101 monoclonal antibody reacts with mouse VEGFR-2 (vascular endothelial growth factor receptor 2) also known as CD309, KDR, and Flk-1. VEGFR-2 is a member of the tyrosine protein kinase family. Upon binding to its ligand VEGF, VEGFR-2 pays key roles in vascular development and permeability. VEGFR-2 is expressed on endothelial cells at high levels in adult heart, lung, kidney, brain, and skeletal muscle as well as other tissues at lower levels. The DC101 antibody has been shown to inhibit VEGFR-2 signaling in vivo.
Target	Mouse VEGFR-2
Immunogen	Mouse VEGFR-2||||SEAPs soluble receptor
Isotype	IgG1, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	DC101
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo blocking of VEGF/VEGFR-2 signaling, in vitro blocking of VEGFR signaling, WB
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific

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Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. This gene encodes one of the two receptors of the VEGF. This receptor, known as kinase insert domain receptor, is a type III receptor tyrosine kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signalling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin alphaVbeta3, T-cell protein tyrosine phosphatase, etc.. Mutations of this gene are implicated in infantile capillary hemangiomas. [provided by RefSeq, May 2009]
Keywords	KDR;kinase insert domain receptor (a type III receptor tyrosine kinase);FLK1;CD309;VEGFR;VEGFR2;vascular endothelial growth factor receptor 2;soluble VEGFR2;fetal liver kinase 1;fetal liver kinase-1;protein-tyrosine kinase receptor Flk-1;tyrosine kinase growth factor receptor;

GENE INFORMATION

Official Symbol	kinase insert domain receptor (a type III receptor tyrosine kinase)
Synonyms	KDR; kinase insert domain receptor (a type III receptor tyrosine kinase); FLK1; CD309; VEGFR; VEGFR2; vascular endothelial growth factor receptor 2; soluble VEGFR2; fetal liver kinase 1; fetal liver kinase-1; protein-tyrosine kinase receptor Flk-1; tyrosine kinase growth factor receptor;
References	Arulanandam, R., et al. (2015). "VEGF-Mediated Induction of PRD1-BF1/Blimp1 Expression Sensitizes Tumor Vasculature to Oncolytic Virus Infection." Cancer Cell 28(2): 210-224. PubMed;Kilarski, W. W., et al. (2009). "Biomechanical regulation of blood vessel growth during tissue vascularization." Nat Med 15(6): 657-664. PubMed;

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