### For Research Use Only

# VEGFR2/KDR Recombinant antibody

Catalog Number:83049-4-RR 1 Publications



**Basic Information** 

Catalog Number: 83049-4-RR

Size:

NM\_002253 GeneID (NCBI): 3791

GenBank Accession Number:

**Purification Method:** Protein A purification CloneNo.: 230238D7

1000 ug/ml Source: Rabbit Isotype:

**UNIPROT ID:** Recommended Dilutions: P35968-1 WB 1:500-1:2000 IHC 1:200-1:800 Full Name:

kinase insert domain receptor (a type III receptor tyrosine kinase)

Calculated MW: 152kd

Observed MW: 150 kDa, 230 kDa

**Applications** 

**Tested Applications:** WB, IHC, FC, ELISA Cited Applications:

Species Specificity:

human **Cited Species:** 

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: human placenta tissue,

IHC: human placenta tissue, human rectal cancer tissue, human tonsillitis tissue

## **Background Information**

KDR, also named as VEGFR-2, FLK1 and CD309, is a receptor for VEGF or VEGFC. KDR which belongs to the protein kinase superfamily, has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions. KDR functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. Mutations of this gene are implicated in infantile capillary hemangiomas.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Hanting Wang	38862832	Cell Biol Toxicol	WB

Storage

Storage:

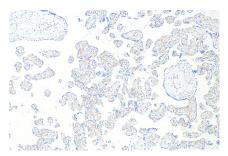
Store at -20°C. Stable for one year after shipment.

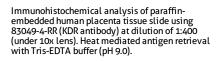
Storage Buffer

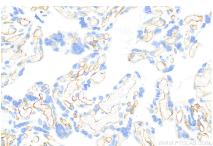
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

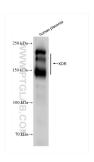
## **Selected Validation Data**



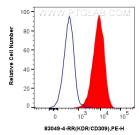




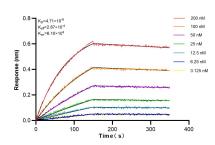
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 83049-4-RR (KDR antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



human placenta tissue was subjected to SDS PAGE followed by western blot with 83049-4-RR (KDR antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



1x10^6 HUVEC cells were surface stained with 0.25 ug VEGF Receptor 2 Recombinant antibody (83049-4-RR, Clone:230238D7) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were not fixed.



Biolayer interferometry (BLL) kinetic assays of 83049-4-RR against Human KDR were performed. The affinity constant is 4.71 nM.