

## Datasheet for ABIN2180048

## anti-VEGFR2/CD309 antibody (AA 101-200) (AbBy Fluor® 555)



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Quantity:	100 μL	
Target:	VEGFR2/CD309 (VEGFR2)	
Binding Specificity:	AA 101-200	
Reactivity:	Human, Mouse, Rat, Rabbit	
Host:	Rabbit	
Clonality:	Polyclonal	
Conjugate:	This VEGFR2/CD309 antibody is conjugated to AbBy Fluor® 555	
Application:	Flow Cytometry (FACS), Immunofluorescence (Paraffin-embedded Sections) (IF (p))	
Product Details		
Immunogen:	KLH conjugated synthetic peptide derived from human VEGFR2	
Isotype:	IgG	
Cross-Reactivity:	Human, Mouse, Rabbit, Rat	
Predicted Reactivity:	Dog,Cow,Sheep,Pig,Horse	
Purification:	Purified by Protein A.	
Target Details		
Target:	VEGFR2/CD309 (VEGFR2)	
Alternative Name:	VEGFR2	
Background:	Synonyms: FLK1, CD309, VEGFR, VEGFR2, Vascular endothelial growth factor receptor 2,	

VEGFR-2, Fetal liver kinase 1, FLK-1, Kinase insert domain receptor, KDR, Protein-tyrosine kinase receptor flk-1

Background: Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFC and VEGFD. Plays an essential role in the regulation of angiogenesis, vascular development, vascular permeability, and embryonic hematopoiesis. Promotes proliferation, survival, migration and differentiation of endothelial cells. Promotes reorganization of the actin cytoskeleton. Isoforms lacking a transmembrane domain, such as isoform 2 and isoform 3, may function as decoy receptors for VEGFA, VEGFC and/or VEGFD. Isoform 2 plays an important role as negative regulator of VEGFA- and VEGFC-mediated lymphangiogenesis by limiting the amount of free VEGFA and/or VEGFC and preventing their binding to FLT4. Modulates FLT1 and FLT4 signaling by forming heterodimers. Binding of vascular growth factors to isoform 1 leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, reorganization of the actin cytoskeleton and activation of PTK2/FAK1. Required for VEGFA-mediated induction of NOS2 and NOS3, leading to the production of the signaling molecule nitric oxide (NO) by endothelial cells. Phosphorylates PLCG1. Promotes phosphorylation of FYN, NCK1, NOS3, PIK3R1, PTK2/FAK1 and SRC.

Gene ID: 3791

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: FCM 1:20-100

IF(IHC-P) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

## Handling

Concentration:	1 μg/μL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months