

Recombinant Human Vascular endothelial growth factor receptor 2(KDR),partial

Catalog No: #AP70468

Package Size: #AP70468-1 20ug #AP70468-2 100ug #AP70468-3 1mg



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Description

Product Name	Recombinant Human Vascular endothelial growth factor receptor 2(KDR),partial
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:20-764aaSequence Info:Extracellular Domain
Other Names	Fetal liver kinase 1 ;FLK-1Kinase insert domain receptor ;KDRProtein-tyrosine kinase receptor flk-1; CD309
Accession No.	P35968
Calculated MW	110.3 kDa
Tag Info	N-terminal GST-tagged
Target Sequence	ASVGLPSVSLDLPRLSIQKDILTIKANTTLQITCRGQRDLWLWPNNQSGSEQRVEVTECSDGLFCKLTIPKVI GNDTGAYKCFYRETDLASVIYVYVQDYRSPFIASVSDQHGVVYITENKNKTVVIPCLGSISNLNVSLCARYPEK RFVPDGNRISWDSKKGFTIPSYMISYAGMVFCEAKINDESYQSIMYIVVVVGYRIYDVVLSPSHGIELSVGEKLV LNCTARTELVGIDFNWEYPSSKHQHKLVNRDLKTQSGSEMCKFLSTLTIDGVTRSDQGLYTCAASSGLMTK KNSTFVRVHEKPFVAFGSGMESLVEATVGERVRIPAKYLGYPPEIKWYKNGIPLESNHTIKAGHVLTIMEVSE RDTGNYTVILTNPISKEKQSHVVSLLVYVPPQIGEKSLISPVDYQYGTQTCTVYAIPPPHHIHWYWQLEEE CANEPSQAVSVTNYPYCEEWRSVEDFQGGNKIEVNKNQFALIEGKNKTVSTLVIQAANVSALYKCEAVNKGVR GERVISFHVTRGPEITLQPDMPTEQESVSLWCTADRSTFENLTWYKLGQPPLIHVGELPTPVCKNLDTLWK LNATMFSNSTNDILIMELKNASLQDQGDYVCLAQDRKTKKRHCVVRQLTVLERVAPTITGNLENQTTSIGESIEV SCTASGNPPPQIMWFKDNETLVEDSGIVLKDGNRNLTIRVRKEDEGLYTCQACSVLGCACVVEAFFIIEGAQEK TNLE
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

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 bryonic 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

References

Vascular endothelial cell growth-activated XBP1 splicing in endothelial cells is crucial for angiogenesis.Zeng L., Xiao Q., Chen M., Margariti A., Martin D., Ivetic A., Xu H., Mason J., Wang W., Cockerill G., Mori K., Li J.Y., Chien S., Hu Y., Xu Q.Circulation 127:1712-1722(2013)Research Topic:Cancer

Note: This product is for in vitro research use only and is not intended for use in humans or animals.