

Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab) Recombinant Antibody Catalog # APR10508

Specification

Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab) - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW FC, Kinetics, Animal Model <u>P17948</u> Human Monoclonal IgG1 145 KDa

Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab) - Additional Information

Target/Specificity VEGFR1 / FLT1

Endotoxin < 0.001EU/ μg,determined by LAL method.

Conjugation Unconjugated

Expression system CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab) - Protein Information

Name FLT1

Synonyms FLT, FRT, VEGFR1

Function

Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFB and PGF, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. Acts as a positive regulator of postnatal retinal hyaloid vessel regression (By similarity). May play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells. Can promote endothelial cell proliferation, survival and angiogenesis in adulthood. Its function in promoting cell proliferation seems to be cell-type specific. Promotes PGF-mediated proliferation of endothelial cells, proliferation of some types of cancer cells, but does not promote proliferation of normal fibroblasts (in vitro). Has very high affinity for VEGFA and relatively low protein kinase activity; may function as a negative regulator



of VEGFA signaling by limiting the amount of free VEGFA and preventing its binding to KDR. Modulates KDR signaling by forming heterodimers with KDR. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leading to activation of phosphatidylinositol kinase and the downstream signaling pathway. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Phosphorylates SRC and YES1, and may also phosphorylate CBL. Promotes phosphorylation of AKT1 at 'Ser-473'. Promotes phosphorylation of PTK2/FAK1 (PubMed:16685275).

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Endosome. Note=Autophosphorylation promotes ubiquitination and endocytosis [Isoform 3]: Secreted. [Isoform 5]: Cytoplasm. [Isoform 7]: Cytoplasm.

Tissue Location

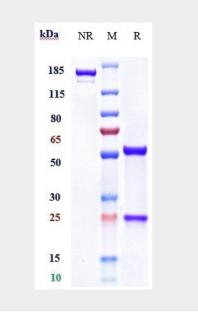
Detected in normal lung, but also in placenta, liver, kidney, heart and brain tissues. Specifically expressed in most of the vascular endothelial cells, and also expressed in peripheral blood monocytes. Isoform 2 is strongly expressed in placenta. Isoform 3 is expressed in corneal epithelial cells (at protein level). Isoform 3 is expressed in vascular smooth muscle cells (VSMC)

Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab) - Protocols

Provided below are standard protocols that you may find useful for product applications.

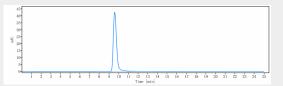
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab) - Images





Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-VEGFR1 / FLT1 Reference Antibody (icrucumab)is more than 95% ,determined by SEC-HPLC.