

Vascular Endothelial Growth Factor Receptor 2 Active Protein | VEGFR2 active protein

Active Vascular Endothelial Growth Factor Receptor 2 (VEGFR2)

CATALOG #
AAA150107

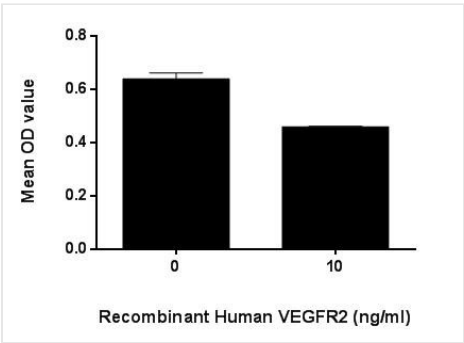
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

Vascular Endothelial Growth Factor Receptor 2; Active Vascular Endothelial Growth Factor Receptor 2 (VEGFR2); CD309; FLK1; VEGFR; KDR; A Type III Receptor Tyrosine Kinase; Kinase Insert Domain Receptor; Fetal Liver Kinase-1; VEGFR2 active protein

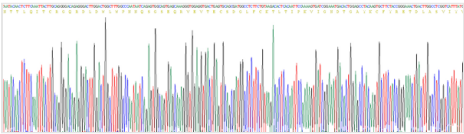
PRODUCT SPECIFICATIONS

Purity/Purification	>97%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Asn46~Thr320
Sequence Length	1356
Applicable Applications for VEGFR2 active protein	Activity Assay, Cell Culture
Species	Human
Tag	N-terminal His Tag
Isoelectric Point	7.6
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



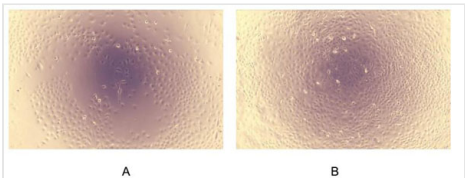
Bioactivity

Figure. VEGFR2 inhibit VEGF-dependent proliferation of ECV-304 cells.



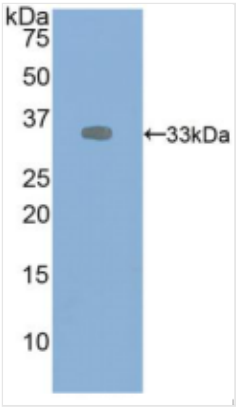
Gene Sequencing

Figure. Gene Sequencing (Extract



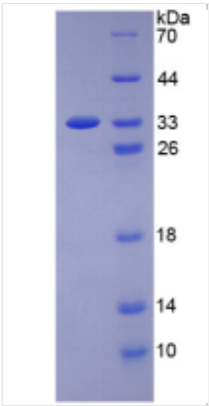
Application Data

Figure. Cell proliferation of ECV-304 cells inhibit by VEGFR2.Vascular Endothelial Growth Factor Receptor 2 (VEGFR2) also known as kinase insert domain receptor acts as a cell-surface receptor for VEGFA, VEGFC and VEGFD. VEGFR2 functions as the primary mediator of vascular endothelial growth factor activation in endothelial cells. Regulation of VEGFR-2 expression appears critical in mitogenesis, differentiation, and angiogenesis. To test the effect on inhibit the VEGF-dependent proliferation of endothelium cells, ECV-304 cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 2% serum standard DMEM including 1g/mL Vascular Endothelial Growth Factor C (VEGFC) and various concentrations of recombinant human VEGFR2. After incubated for 96h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10uL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37. Proliferation of ECV-304 cells after incubation with VEGFR2 for 96h observed by inverted microscope was shown in Figure 2. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant VEGFR2 for 96h. The result was shown in Figure 2. It was obvious that VEGFR2 significantly inhibit cell viability of ECV-304.(A) ECV-304 cells cultured in DMEM, stimulated with 10ng/mL VEGFR2 for 96h; (B) Unstimulated ECV-304 cells cultured in DMEM for 96h.



WB (Western Blot)

Figure. Western Blot



SDS-PAGE

Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for VEGFR2 active protein	Signal transduction; CD & Adhesion molecule; Tumor immunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	11321597
NCBI GeneID	3791
NCBI Accession #	NP_002244.1
NCBI GenBank Nucleotide #	NP_002244.1
UniProt Accession #	P35968
Molecular Weight	Predicted Molecular Mass: 32.1kDa Accurate Molecular Mass: 33kDa
NCBI Official Full Name	vascular endothelial growth factor receptor 2
NCBI Official Synonym Full Names	kinase insert domain receptor
NCBI Official Symbol	KDR
NCBI Official Synonym Symbols	FLK1; CD309; VEGFR; VEGFR2
NCBI Protein Information	vascular endothelial growth factor receptor 2
UniProt Protein Name	Vascular endothelial growth factor receptor 2
UniProt Gene Name	KDR
UniProt Synonym Gene Names	FLK1; VEGFR2; VEGFR-2; FLK-1; KDR
UniProt Entry Name	VGFR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/vegfr2-active-protein/vascular-endothelial-growth-factor-receptor-2/150107>