

Vascular endothelial growth factor A Recombinant Protein | VEGFA recombinant protein

Recombinant Human Vascular endothelial growth factor A

CATALOG #
AAA113912

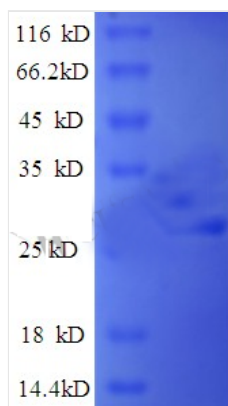
PRODUCT SYNONYMS

Vascular endothelial growth factor A; Recombinant Human Vascular endothelial growth factor A; Vascular permeability factor; VPF; VEGFA recombinant protein

PRODUCT SPECIFICATIONS

Purity/Purification	Greater than 90% as determined by SDS-PAGE.
Form/Format	Liquid containing glycerol
Sequence Positions	27-232
Sequence	APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVPT TEESNITMQI MRIKPHQGQH IGEMSFLQHN KCECRPKKDR ARQEKKSVRG KGKGQKRKRK KSRYKSWSVY VGARCCLMPW SLPGPHPCGP CSERRKHLFV QDPQTCKCSC KNTDSRCKAR QLELNERTCR CDKPRR
Sequence Length	412
Product Note	Applications are user defined. Product is developed and quality control tested in house, data or additional information may be provided upon request. The researcher needs to establish and confirm the suitability of the product for their application.
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for VEGFA recombinant protein	Growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. Binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth.
Product Categories/Family for VEGFA recombinant protein	Cancer; Raw Materials Assay Development

References

Vascular endothelial growth factor is a secreted angiogenic mitogen.Leung D.W., Cachianes G., Kuang W.-J., Goeddel D.V., Ferrara N.Science 246:1306-1309(1989) Vascular permeability factor, an endothelial cell mitogen related to PDGF.Keck P.J., Hauser S.D., Krivi G., Sanzo K., Warren T., Feder J., Connolly D.T.Science 246:1309-1312(1989) The human gene for vascular endothelial growth factor. Multiple protein forms are encoded through alternative exon splicing.Tischer E., Mitchell R., Hartman T., Silva M., Gospodarowicz D., Fiddes J.C., Abraham J.A.J. Biol. Chem. 266:11947-11954(1991) The vascular endothelial growth factor family identification of a fourth molecular species and characterization of alternative splicing of RNA.Houck K.A., Ferrara N., Winer J., Cachianes G., Li B., Leung D.W.Mol. Endocrinol. 5:1806-1814(1991) AIDS-associated Kaposi's sarcoma cells in culture express vascular endothelial growth factor.Weindel K., Marme D., Weich H.A.Biochem. Biophys. Res. Commun. 183:1167-1174(1992) VEGF145, a secreted vascular endothelial growth factor isoform that binds to extracellular matrix.Poltorak Z., Cohen T., Sivan R., Kandelis Y., Spira G., Vlodavsky I., Keshet E., Neufeld G.J. Biol. Chem. 272:7151-7158(1997) Identification and characterization of a new splicing variant of vascular endothelial growth factor VEGF183.Lei J., Jiang A., Pei D.Biochim. Biophys. Acta 1443:400-406(1998) Identification of a human VPF/VEGF 3' untranslated region mediating hypoxia-induced mRNA stability.Claffey K.P., Shih S.-C., Mullen A., Dziennis S., Cusick J.L., Abrams K.R., Lee S.W., Detmar M.Mol. Biol. Cell 9:469-481(1998) Heterogeneous vascular endothelial growth factor (VEGF) isoform mRNA and receptor mRNA expression in human glomeruli, and the identification of VEGF148 mRNA, a novel truncated splice variant.Whittle C.J., Gillespie K.M., Harrison R., Mathieson P.W., Harper S.J.Clin. Sci. 97:303-312(1999) VEGF165b, an inhibitory splice variant of vascular endothelial growth factor, is down-regulated in renal cell carcinoma.Bates D.O., Cui T.-G., Doughty J.M., Winkler M., Sugiono M., Shields J.D., Peat D., Gillatt D., Harper S.J.Cancer Res. 62:4123-4131(2002) Human cDNA for the vascular endothelial growth factor isoform VEGF165.Murata H., Fukushima J., Hattori S., Okuda K., Yanagi H. Human cDNA for vascular endothelial growth factor isoform VEGF121.Sato J.D., Whitney R.G.Cloning of vascular endothelial growth factor (VEGF) cDNA.Liu J., Peng X., Yuan J., Qiang B.Cloning and identification of vascular endothelial growth factor isoform VEGF165.Shan Z.X., Yu X.Y., Lin Q.X., Fu Y.H., Zheng M., Tan H.H., Lin S.G. Cloning and characterization of VEGF from LNCaP cells, a line of prostate cancer cells.Koul S., Johnson T., Meacham R.B., Koul H.K.VEGF111, a new VEGF-A variant lacking exons 5, 6 and 7.Mineur P.J., Colige A.C., Lambert C.A.Human protein factory for converting the transcriptome into an in vitro-expressed proteome.Goshima N., Kawamura Y., Fukumoto A., Miura A., Honma R., Satoh R., Wakamatsu A., Yamamoto J., Kimura K., Nishikawa T., Andoh T., Iida Y., Ishikawa K., Ito E., Kagawa N., Kaminaga C., Kanehori K., Kawakami B., Kenmochi K., Kimura R., Kobayashi M., Kuroita T., Kuwayama H., Maruyama Y., Matsuo K., Minami K., Mitsubori M., Mori M., Morishita R., Murase A., Nishikawa A., Nishikawa S., Okamoto T., Sakagami N., Sakamoto Y., Sasaki Y., Seki T., Sono S., Sugiyama A., Sumiya T., Takayama T., Takayama Y., Takeda H., Togashi T., Yahata K., Yamada H., Yanagisawa Y., Endo Y., Imamoto F., Kisu Y., Tanaka S., Isogai T., Imai J., Watanabe S., Nomura N.Nat. Methods 5:1011-1017(2008) The DNA sequence and analysis of human chromosome 6.Mungall A.J., Palmer S.A., Sims S.K., Edwards C.A., Ashurst J.L., Wilming L., Jones M.C., Horton R., Hunt S.E., Scott C.E., Gilbert J.G.R., Clamp M.E., Bethel G., Milne S., Ainscough R., Almeida J.P., Ambrose K.D., Andrews T.D., Ashwell R.I.S., Babbage A.K., Bagguley C.L., Bailey J., Banerjee R., Barker D.J., Barlow K.F., Bates K., Beare D.M., Beasley H., Beasley O., Bird C.P., Blakey S.E., Bray-Allen S., Brook J., Brown A.J., Brown J.Y., Burford D.C., Burrill W., Burton J., Carder C., Carter N.P., Chapman J.C., Clark S.Y., Clark G., Clee C.M., Clegg S., Cobley V., Collier R.E., Collins J.E., Colman L.K., Corby N.R., Coville G.J., Culley K.M., Dhami P., Davies J., Dunn M., Earthrowl M.E., Ellington A.E., Evans K.A., Faulkner L., Francis M.D., Frankish A., Frankland J., French L., Garner P., Garnett J., Ghorri M.J., Gilby L.M., Gillson C.J., Glithero R.J., Graffham D.V., Grant M., Gribble S., Griffiths C., Griffiths M.N.D., Hall R., Halls K.S., Hammond S., Harley J.L., Hart E.A., Heath P.D., Heathcote R., Holmes S.J., Howden P.J., Howe K.L., Howell G.R., Huckle E., Humphray S.J., Humphries M.D., Hunt A.R., Johnson C.M., Joy A.A., Kay M., Keenan S.J., Kimberley A.M., King A., Laird G.K., Langford C., Lawlor S., Leongamornlert D.A., Leversha M., Lloyd C.R., Lloyd D.M., Loveland J.E., Lovell J., Martin S., Mashreghi-Mohammadi M., Maslen G.L., Matthews L., McCann O.T., McLaren S.J., McLay K., McMurray A., Moore M.J.F., Mullikin J.C., Niblett D., Nickerson T., Novik K.L., Oliver K., Overton-Larty E.K., Parker A., Patel R., Pearce A.V., Peck A.I., Phillimore B.J.C.T., Phillips S., Plumb R.W., Porter K.M., Ramsey Y., Ranby S.A., Rice C.M., Ross M.T., Searle S.M., Sehra H.K., Sheridan E., Skuce C.D., Smith S., Smith M., Spraggon L., Squares S.L., Steward C.A., Sycamore N., Tamlyn-Hall G., Tester J., Theaker A.J., Thomas D.W., Thorpe A., Tracey A., Tromans A., Tubby B., Wall M., Wallis J.M., West A.P., White S.S., Whitehead S.L., Whittaker H., Wild A., Willey D.J., Wilmer T.E., Wood J.M., Wray P.W., Wyatt J.C., Young L., Younger R.M., Bentley D.R., Coulson A., Durbin R.M., Hubbard T., Sulston J.E., Dunham I., Rogers J., Beck S.Nature 425:805-811(2003)

NCBI AND UNIPROT INFORMATION

NCBI GI #	76781480
NCBI GeneID	7422
NCBI Accession #	NP_001020537.2
NCBI GenBank Nucleotide #	NM_001025366.2

UniProt Accession #	P15692; O60720; O75875; Q074Z4; Q16889; B5BU86; H0Y2S8; H0Y407; H0Y414; H0Y462; H0Y8N2; H3BLW7
Molecular Weight	51.3kD
NCBI Official Full Name	vascular endothelial growth factor A isoform a
NCBI Official Synonym Full Names	vascular endothelial growth factor A
NCBI Official Symbol	VEGFA
NCBI Official Synonym Symbols	VPF; VEGF; MVCD1
NCBI Protein Information	vascular endothelial growth factor A
UniProt Protein Name	Vascular endothelial growth factor A
UniProt Gene Name	VEGFA
UniProt Synonym Gene Names	VEGF; VEGF-A; VPF
UniProt Entry Name	VEGFA_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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