Datasheet for ABIN3113486

FLT4 Protein (AA 25-1363) (rho-1D4 tag)

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Overview

Quantity:	1 mg
Target:	FLT4
Protein Characteristics:	AA 25-1363
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FLT4 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	YSMTPPTLNI TEESHVIDTG DSLSISCRGQ HPLEWAWPGA QEAPATGDKD SEDTGVVRDC EGTDARPYCK VLLLHEVHAN DTGSYVCYYK YIKARIEGTT AASSYVFVRD FEQPFINKPD TLLVNRKDAM WVPCLVSIPG LNVTLRSQSS VLWPDGQEVV WDDRRGMLVS TPLLHDALYL QCETTWGDQD FLSNPFLVHI TGNELYDIQL LPRKSLELLV GEKLVLNCTV WAEFNSGVTF DWDYPGKQAE RGKWVPERRS QQTHTELSSI LTIHNVSQHD LGSYVCKANN GIQRFRESTE VIVHENPFIS VEWLKGPILE ATAGDELVKL PVKLAAYPPP EFQWYKDGKA LSGRHSPHAL VLKEVTEAST GTYTLALWNS AAGLRRNISL ELVVNVPPQI HEKEASSPSI YSRHSRQALT CTAYGVPLPL SIQWHWRPWT PCKMFAQRSL RRRQQQDLMP QCRDWRAVTT QDAVNPIESL DTWTEFVEGK NKTVSKLVIQ NANVSAMYKC VVSNKVGQDE RLIYFYVTTI PDGFTIESKP SEELLEGQPV LLSCQADSYK YEHLRWYRLN LSTLHDAHGN PLLLDCKNVH LFATPLAASL EEVAPGARHA TLSLSIPRVA PEHEGHYVCE VQDRRSHDKH CHKKYLSVQA LEAPRLTQNL TDLLVNVSDS LEMQCLVAGA HAPSIVWYKD ERLLEEKSGV DLADSNQKLS IQRVREEDAG

RYLCSVCNAK GCVNSSASVA VEGSEDKGSM EIVILVGTGV IAVFFWVLLL LIFCNMRRPA HADIKTGYLS IIMDPGEVPL EEQCEYLSYD ASQWEFPRER LHLGRVLGYG AFGKVVEASA FGIHKGSSCD TVAVKMLKEG ATASEHRALM SELKILIHIG NHLNVVNLLG ACTKPQGPLM VIVEFCKYGN LSNFLRAKRD AFSPCAEKSP EQRGRFRAMV ELARLDRRRP GSSDRVLFAR FSKTEGGARR ASPDQEAEDL WLSPLTMEDL VCYSFQVARG MEFLASRKCI HRDLAARNIL LSESDVVKIC DFGLARDIYK DPDYVRKGSA RLPLKWMAPE SIFDKVYTTQ SDVWSFGVLL WEIFSLGASP YPGVQINEEF CQRLRDGTRM RAPELATPAI RRIMLNCWSG DPKARPAFSE LVEILGDLLQ GRGLQEEEEV CMAPRSSQSS EEGSFSQVST MALHIAQADA EDSPPSLQRH SLAARYYNWV SFPGCLARGA ETRGSSRMKT FEEFPMTPTT YKGSVDNQTD SGMVLASEEF EQIESRHRQE SGFSCKGPGQ NVAVTRAHPD SQGRRRRPER GARGGQVFYN SEYGELSEPS EEDHCSPSAR VTFFTDNSY

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human FLT4 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification: Three step purification of membrane proteins expressed in baculovirus infected SF9 insect

Product Details

	cells: 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	FLT4
Alternative Name:	FLT4 (FLT4 Products)
Background:	Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFC and VEGFD, and plays an essential role in adult lymphangiogenesis and in the development of the vascular network and the cardiovascular system during embryonic development. Promotes proliferation, survival and migration of endothelial cells, and regulates angiogenic sprouting. Signaling by activated FLT4 leads to enhanced production of VEGFC, and to a lesser degree VEGFA, thereby creating a positive feedback loop that enhances FLT4 signaling. Modulates KDR signaling by forming heterodimers. The secreted isoform 3 may function as a decoy receptor for VEGFC and/or VEGFD and play an important role as a negative regulator of VEGFC-mediated lymphangiogenesis and angiogenesis. Binding of vascular growth factors to isoform 1 or isoform 2 leads to the activation of several signaling cascades, isoform 2 seems to be less efficient in signal transduction, because it has a truncated C-terminus and therefore lacks several phosphorylation sites. Mediates activation of the MAPK1/ERK2, MAPK3/ERK1 signaling pathway, of MAPK8 and the JUN signaling pathway, and of the AKT1 signaling pathway. Phosphorylates SHC1. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Promotes phosphorylation of MAPK8 at 'Thr-183' and 'Tyr-185', and of AKT1 at 'Ser-473'. {ECO:0000269|PubMed:11532940, ECO:0000269|PubMed:15102829, ECO:0000269|PubMed:15474514, ECO:0000269|PubMed:16076871,

Target Details

	ECO:0000269|PubMed:16452200, ECO:0000269|PubMed:17210781, ECO:0000269|PubMed:19610651, ECO:0000269|PubMed:19779139, ECO:0000269|PubMed:20224550, ECO:0000269|PubMed:20431062, ECO:0000269|PubMed:20445537, ECO:0000269|PubMed:21273538, ECO:0000269|PubMed:7675451, ECO:0000269|PubMed:8700872, ECO:0000269|PubMed:9435229}.
Molecular Weight:	151.4 kDa Including tag.
UniProt:	P35916
Pathways:	RTK Signaling, Signaling Events mediated by VEGFR1 and VEGFR2, VEGF Signaling

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)