

Datasheet for ABIN3134803

FGFR4 Protein (AA 388-799) (His tag)



Overview

Quantity:	1 mg
Target:	FGFR4
Protein Characteristics:	AA 388-799
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FGFR4 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:

HRQVIRGHYS RQPVTIQKLS RFPLARQFSL ESRSSGKSSL SLVRGVRLSS SGPPLLTGLV
NLDLPLDPLW EFPRDRLVLG KPLGEGCFGQ VVRAEAFGMD PSRPDQTSTV AVKMLKDNAS
DKDLADLVSE MEVMKLIGRH KNIINLLGVC TQEGPLYVIV ECAAKGNLRE FLRARRPPGP
DLSPDGPRSS EGPLSFPALV SCAYQVARGM QYLESRKCIH RDLAARNVLV TEDDVMKIAD
FGLARGVHHI DYYKKTSNGR LPVKWMAPEA LFDRVYTHQS DVWSFEILLW EIFTLGGSPY
PGIPVEELFS LLREGHRMER PPNCPSELYG LMRECWHAAP SQRPTFKQLV EALDKVLLAV
SEEYLDLRLT FGPFSPSNGD ASSTCSSSDS VFSHDPLPLE PSPFPFSDSQ TT

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.
- Mouse Fgfr4 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:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

- In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. 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: FGFR4

Alternative Name: Fgfr4 (FGFR4 Products)

Format:

Target Details	
Background:	Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and
	plays a role in the regulation of cell proliferation, differentiation and migration, and in regulation
	of lipid metabolism, bile acid biosynthesis, glucose uptake, vitamin D metabolism and
	phosphate homeostasis. Required for normal down-regulation of the expression of CYP7A1, the
	rate-limiting enzyme in bile acid synthesis, in response to FGF19. Phosphorylates PLCG1 and
	FRS2. Ligand binding 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. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1,
	and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling
	pathway, as well as of the AKT1 signaling pathway. Promotes SRC-dependent phosphorylation
	of the matrix protease MMP14 and its lysosomal degradation. FGFR4 signaling is down-
	regulated by receptor internalization and degradation, MMP14 promotes internalization and
	degradation of FGFR4. Plays a role in postnatal lung development. May be involved in the
	development of skeletal muscle cell lineages. {ECO:0000269 PubMed:10809780,
	ECO:0000269 PubMed:17664243, ECO:0000269 PubMed:19237543,
	ECO:0000269 PubMed:21561999, ECO:0000269 PubMed:9716527}.
Molecular Weight:	46.8 kDa Including tag.
UniProt:	Q03142
Pathways:	RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin
	Signaling Pathway, Carbohydrate Homeostasis, Growth Factor Binding
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:	Protein has not been tested for activity yet. 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	
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Liquid

Handling

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)