

# Datasheet for ABIN7564799 FIG4 Protein (AA 1-907) (His tag)



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Quantity:	1 mg
Target:	FIG4
Protein Characteristics:	AA 1-907
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FIG4 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Purpose:	Custom-made recombinat Fig4 Protein expressed in mammalien cells.
Sequence:	MPTAAAPIIS SVQKLVLYET RARYFLVGSN HAETKYRVLK IDRTEPKDLV VIDDRHVYTQ
	QEVRELLGRL DLGNRTKMSQ KGSSGLFRAV SAFGVVGFVR FLEGYYIVLI TKRRKMADIG
	GHAIYKIEDT SMIYIPNDSV RISHPDEARY LRIFQNVDLS SNFYFSYSYD LSHSLQYNLT
	VLRMPLEMLK SETSKACQES FDIFEDEGLI TQGGSGVFGI SSEPYMKYVW NGELLDIIKN
	TVHRDWLLYI IHGFCGQSKL LIYGRPVYVT LIARRSSRFA GTRFLKRGAN CEGDVANEVE
	TEQILCDASV MSFTAGSYSS YVQVRGSVPL FWSQDISTMM PKPPITLDQA DPFAHVAALH
	FDQMLQRFGS PIIILNLVKE REKRKHERIL SEELVAAVTY LNQFLPPEHT IVYIPWDMAK
	YTKSKLCNVL DRLNVIAESV VKKTGFFVNR PDSYCSILRP DEKWNELGGH VIPTGRLQTG
	ILRTNCVDCL DRTNTAQFMV GKCALAYQLY SLGLIDKPNL QFDTDAVRLF EELYEDHGDT
	LSLQYGGSQL VHRVKTYRKI APWTQHSKDI MQTLSRYYSN AFSDADRQDS INLFLGVFHP
	TEGKPHLWEL PTDFYLHHKN TMSLLPPRRS YTYWWTPEVV KHLPLPYDEV ICAANLKKLM

VKKFHRWEEE IDIHNEFFRP YELSSFDDTF CLAMTSSARD FMPKTVGIDP SPFTVRKPDE
TGKSVLGNKN TREEAVLQRK TAASAPPPPS EEAVSSSSED DSGTDREDEG SISQRSTPVK
MTDTGDSAKA TENVVQPMKE VYGVSLSSSL SEEDHSIYAR FVQLGQSQHK QDRGNQQLCS
RCSDGVIKLT PISAFSQDNI YEVQPPRVDR KSTEIFQAHI QASQGIMQPL GKEDTAMYRE YIRNRYL

Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · 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 try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

# Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### Grade:

Target:

custom-made

FIG4

### **Target Details**

Alternative Name:	Fig4 (FIG4 Products)
Background:	Polyphosphoinositide phosphatase (EC 3.1.3) (EC 3.1.3.36) (EC 3.1.3.86) (Phosphatidylinositol
	3,5-bisphosphate 5-phosphatase) (SAC domain-containing protein 3) (Serine-protein
	phosphatase FIG4) (EC 3.1.3.16),FUNCTION: The PI(3,5)P2 regulatory complex regulates both
	the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2). In vitro,
	hydrolyzes all three D5-phosphorylated polyphosphoinositide substrates in the order
	$PtdIns(4,5)P2 > PtdIns(3,5)P2 > PtdIns(3,4,5)P3. \ Plays a role in the biogenesis of endosome$

carrier vesicles (ECV) / multivesicular bodies (MVB) transport intermediates from early endosomes. {ECO:0000269|PubMed:17572665, ECO:0000269|PubMed:19037259}., FUNCTION: Dual specificity phosphatase component of the PI(3,5)P2 regulatory complex which regulates both the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2). Catalyzes the dephosphorylation of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) to form phosphatidylinositol 3-phosphate. Has serine-protein phosphatase activity acting on PIKfyve to stimulate its lipid kinase activity, its catalytically activity being required for maximal PI(3,5)P2 production. In vitro, hydrolyzes all three D5-phosphorylated polyphosphoinositide and although displaying preferences for PtdIns(3,5)P2, it is capable of hydrolyzing PtdIns(3,4,5)P3 and PtdIns(4,5)P2, at least in vitro. {ECO:0000250|UniProtKB:Q92562, ECO:0000269|PubMed:17572665, ECO:0000269|PubMed:19037259}.

Molecular Weight:

103.4 kDa

UniProt:

Q91WF7

Pathways:

**Inositol Metabolic Process** 

### **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 guarantee though.

Restrictions:

For Research Use only

## Handling

Format:	Liquid	
Buffer:	The buffer composition 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:	12 months	