# antibodies .- online.com





## POFUT2 Protein (AA 22-429) (His tag)



**Image** 



Go to Product page

#### Overview

Quantity:	1 mg
Target:	POFUT2
Protein Characteristics:	AA 22-429
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This POFUT2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

#### **Product Details**

### Sequence:

SGEEFWPGQS AADILSGAAS RRRYLLYDVN PPEGFNLRRD VYIRVASLLK TLLKTEEWVL VLPPWGRLYH WQSPDIHQVR IPWSEFFDLP SLNKNIPVIE YEQFIAESGG PFIDQVYVLQ GYAEGWKEGT WEEKVDARPC IDPLLYSQDK HEYYRGWFWG YEETRGLNVS CLSVQGSASI VAPVLLKNTS ARSVMLDRAE NLLHDHYGGR EYWDTRRSMV FAKHLRAVGD EFRSQHLNST DAADKMAPEE DWTKMKVKLG SALGGPYLGV HLRRKDFIWG HREDVPSLEG AVKKIRSLMK THQLDKVFVA TDAIRKEQEE LRKLLPEMVR FEPTWEELEL YKDGGVAIID QWICAHARFF IGTSVSTFSF RIHEEREILG LDPKTTYNRF CGDQEKACEQ PTHWKIAY

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 Pofut2 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:	POFUT2
Alternative Name:	Pofut2 (POFUT2 Products)

## **Target Details**

Background:	Catalyzes the reaction that attaches fucose through an O-glycosidic linkage to a conserved
	serine or threonine residue in the consensus sequence C1-X(2,3)-S/T-C2-X(2)-G of
	thrombospondin type I repeats (TSRs) where C1 and C2 are the first and second cysteines of
	the repeat, respectively. O-fucosylates members of several protein families including the
	ADAMTS superfamily and the thrombosporin (TSP) and spondin families. Required for the
	proper secretion of ADAMTS family members such as ADAMSL1 and ADAMST13 (By
	similarity). O-fucosylation of TSRs is also required for restricting epithelial to mesenchymal
	transition (EMT), maintaining the correct patterning of mesoderm and localization of the
	definite endoderm. {ECO:0000250, ECO:0000269 PubMed:20637190}.
Molecular Weight:	48.3 kDa Including tag.
UniProt:	Q8VHI3
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	
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)



**Image 1.** "Crystallography Grade" protein due to multi-step, protein-specific purification process