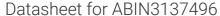
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# MBTPS1 Protein (AA 187-1052) (rho-1D4 tag)



**Image** 



Go to Product page

### Overview

Quantity:	1 mg
Target:	MBTPS1
Protein Characteristics:	AA 187-1052
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MBTPS1 protein is labelled with rho-1D4 tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## **Product Details**

Sequence:

RAIPRQVAQT LQADVLWQMG YTGANVRVAV FDTGLSEKHP HFKNVKERTN WTNERTLDDG
LGHGTFVAGV IASMRECQGF APDAELHIFR VFTNNQVSYT SWFLDAFNYA ILKKMDVLNL
SIGGPDFMDH PFVDKVWELT ANNVIMVSAI GNDGPLYGTL NNPADQMDVI GVGGIDFEDN
IARFSSRGMT TWELPGGYGR VKPDIVTYGA GVRGSGVKGG CRALSGTSVA SPVVAGAVTL
LVSTVQKREL VNPASVKQAL IASARRLPGV NMFEQGHGKL DLLRAYQILS SYKPQASLSP
SYIDLTECPY MWPYCSQPIY YGGMPTIVNV TILNGMGVTG RIVDKPEWRP YLPQNGDNIE
VAFSYSSVLW PWSGYLAISI SVTKKAASWE GIAQGHIMIT VASPAETELH SGAEHTSTVK
LPIKVKIIPT PPRSKRVLWD QYHNLRYPPG YFPRDNLRMK NDPLDWNGDH VHTNFRDMYQ
HLRSMGYFVE VLGAPFTCFD ATQYGTLLLV DSEEEYFPEE IAKLRRDVDN GLSLVIFSDW
YNTSVMRKVK FYDENTRQWW MPDTGGANIP ALNELLSVWN MGFSDGLYEG EFVLANHDMY
YASGCSIAKF PEDGVVITQT FKDQGLEVLK QETAVVENVP ILGLYQIPSE GGGRIVLYGD
SNCLDDSHRQ KDCFWLLDAL LQYTSYGVTP PSLSHSGNRQ RPPSGAGLAP PERMEGNHLH

RYSKVLEAHL GDPKPRPLPA CPHLSWAKPQ PLNETAPSNL WKHQKLLSID LDKVVLPNFR SNRPQVRPLS PGESGAWDIP GGIMPGRYNQ EVGQTIPVFA FLGAMVALAF FVVQISKAKS RPKRRPRAK RPQLAQQAHP ARTPSV

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 Mbtps1 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 cells:

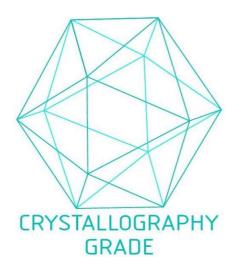
- 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
- 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
- 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.

Product Details	
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:	MBTPS1
Alternative Name:	Mbtps1 (MBTPS1 Products)
Background:	Serine protease that catalyzes the first step in the proteolytic activation of the sterol regulatory element-binding proteins (SREBPs). Other known substrates are BDNF, GNPTAB and ATF6. Cleaves after hydrophobic or small residues, provided that Arg or Lys is in position P4. Cleaves known substrates after Arg-Ser-Val-Leu (SERBP-2), Arg-His-Leu-Leu (ATF6), Arg-Gly-Leu-Thr (BDNF) and its own propeptide after Arg-Arg-Leu-Leu. Mediates the protein cleavage of GNPTAB into subunit alpha and beta, thereby participating in biogenesis of lysosomes (By similarity). {ECO:0000250}.
Molecular Weight:	97.4 kDa Including tag.
UniProt:	Q9WTZ2
Pathways:	ER-Nucleus 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:	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

# 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)

## **Images**



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