

Datasheet for ABIN3095171

## Prosaposin Protein (PSAP) (AA 17-524) (His tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	Prosaposin (PSAP)
Protein Characteristics:	AA 17-524
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Prosaposin protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS), Crystallization (Crys)

#### Product Details

Sequence: GPVLGLKECT RGSVWCQNV KTASDCGAVK HCLQTVWNKP TVKSLPCDIC KDVVTAAGDM  
 LKDNATEEEI LVYLEKTCDW LPKPNMSASC KEIVDSYLPV ILDIKIGEMS RPGEVCSALN  
 LCESLQKHLA ELNHQKQLES NKIPELDMTE VVAPFMANIP LLLYPQDGPR SKPQPKDNGD  
 VCQDCIQMVT DIQTAVRTNS TFVQALVEHV KEECDRLGPG MADICKNYIS QYSEIAIQMM  
 MHMQPKEICA LVGFCDEVKE MPMQTLVPAK VASKNVIPAL ELVEPIKKHE VPAKSDVYCE  
 VCEFLVKEVT KLIDNNKTEK EILDAFDKMC SKLPKSLSEE CQEVVDITYGS SILSILLEEV  
 SPELVCSMLH LCSGTRLPAL TVHVTQPKDG GFCEVCKKL VGYLDRNLEKN STKQEILAAL  
 EKGCSFLPDP YQKQCDQFVA EYEPVLIEIL VEVMDPSFVC LKIGACPSAH KPLLGTCKCI  
 WGPSYWCQNT ETAAQCNAVE HCKRHVWN

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

## Product Details

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- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
  - Human PSAP 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 receipt 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:
1. 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.
  2. 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:	Prosaposin (PSAP)
Alternative Name:	PSAP ( <a href="#">PSAP Products</a> )
Background:	<p>Saposin-A and saposin-C stimulate the hydrolysis of glucosylceramide by beta-glucosylceramidase (EC 3.2.1.45) and galactosylceramide by beta-galactosylceramidase (EC 3.2.1.46). Saposin-C apparently acts by combining with the enzyme and acidic lipid to form an activated complex, rather than by solubilizing the substrate., Saposin-B stimulates the hydrolysis of galacto-cerebroside sulfate by arylsulfatase A (EC 3.1.6.8), GM1 gangliosides by beta-galactosidase (EC 3.2.1.23) and globotriaosylceramide by alpha-galactosidase A (EC 3.2.1.22). Saposin-B forms a solubilizing complex with the substrates of the sphingolipid hydrolases., Saposin-D is a specific sphingomyelin phosphodiesterase activator (EC 3.1.4.12)., Prosaposin: Behaves as a myelinotrophic and neurotrophic factor, these effects are mediated by its G-protein-coupled receptors, GPR37 and GPR37L1, undergoing ligand-mediated internalization followed by ERK phosphorylation signaling. {ECO:0000250 UniProtKB:Q61207, ECO:0000269 PubMed:10383054}., Saposins are specific low-molecular mass non-enzymic proteins, they participate in the lysosomal degradation of sphingolipids, which takes place by the sequential action of specific hydrolases.</p>
Molecular Weight:	57.4 kDa Including tag.
UniProt:	<a href="#">P07602</a>
Pathways:	<a href="#">Positive Regulation of Endopeptidase Activity</a>

## 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.
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
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## 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