

Datasheet for ABIN3094547

## PIAS3 Protein (AA 2-628) (His tag)



[Go to Product page](#)

### 1 Image

#### Overview

Quantity:	1 mg
Target:	PIAS3
Protein Characteristics:	AA 2-628
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PIAS3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

#### Product Details

Sequence: AELGELKHMV MSFRVSELQV LLGFAGR NKS GRKHELLAKA LHLLKSSCAP SVQMKIKELY  
 RRRFPRKTLG PSDLSLLSLP PGTSPVGSPG PLAPIPTLL APGTLGPKR EVDMPHPLPQ  
 PVHPDVTMKP LPFYEVY GEL IRPTTLASTS SQRFEAAHFT FALTPQQVQQ ILTSREVLPG  
 AKCDYTIQVQ LRFCLCETSC PQEDYFPPNL FVKVNGKLCP LPGYLPPTKN GAEPKRPSRP  
 INITPLARLS ATPNTIVVN WSSEFGRNYS LSVYLVRQLT AGTLLQKLRA KGIRNPDHSR  
 ALIKEKLTAD PDSEVATTSL RVSLMCPGLK MRLTVPCRAL TCAHLQSFDA ALYLQMNEKK  
 PTWTCPVCDK KAPYESLIID GLFMEILSSC SDCDEIQFME DGSWCMPMKP KEASEVCPPP  
 GYGLDGLQYS PVQGGDPSEN KKKVEVIDLT IESSSDEEDL PPTKKHCSVT SAAIPALPGS  
 KGVLTSGHQ P SSVLRSPAMG TLGGDFLSSL PLHEYPPAFP LGADIQGLDL FSFLQTESQH  
 YGPSVITSLD EQDALGHFFQ YRGTPSHFLG PLAPTLGSSH CSATPAPPPG RVSSIVAPGG  
 ALREGHGGPL PSGPSLTGCR SDIISLD

**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.
- Human PIAS3 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:	PIAS3
Alternative Name:	PIAS3 ( <a href="#">PIAS3 Products</a> )
Background:	Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase, stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor. Plays a crucial role as a transcriptional coregulation in various cellular pathways, including the STAT pathway and the steroid hormone signaling pathway. Involved in regulating STAT3 signaling via inhibiting STAT3 DNA-binding and suppressing cell growth. Enhances the sumoylation of MTA1 and may participate in its paralog-selective sumoylation (PubMed:21965678, PubMed:9388184). Sumoylates CCAR2 which promotes its interaction with SIRT1 (PubMed:25406032). Diminishes the sumoylation of ZFHX3 by preventing the colocalization of ZFHX3 with SUMO1 in the nucleus (PubMed:24651376). {ECO:0000269 PubMed:21965678, ECO:0000269 PubMed:24651376, ECO:0000269 PubMed:25406032, ECO:0000269 PubMed:9388184}.
Molecular Weight:	68.8 kDa Including tag.
UniProt:	<a href="#">Q9Y6X2</a>
Pathways:	<a href="#">JAK-STAT Signaling</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
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.

## Handling

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Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

## Images

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