

[Go to Product page](#)

Datasheet for ABIN3113168  
**UBA1 Protein (AA 2-1058) (His tag)**

## Overview

Quantity:	2 mg
Target:	UBA1
Protein Characteristics:	AA 2-1058
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This UBA1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	SSSPLSKKRR VSGPDPKPGS NCSPAQSVLS EVPSVPTNGM AKNGSEADID EGLYSRQLYV LGHEAMKRLQ TSSVLVSLR GLGVEIAKNI ILGGVKAVTL HDQGTAWAD LSSQFYLR DIGKNRAEVS QPRLAELNSY VPVTAYTGPL VEDFLSGFQV VVLTNTPLED QLRVGEFCHN RGIKLVVADT RGLFGQLFCD FGEEMILTDS NGEQPLSAMV SMVTKDNPGV VTCLDEARHG FESGDFVSFS EVQGMVELNG NQPMEIKVLG PYTFSICDTS NFSDYIRGGI VSQVKVPKKI SFKSLVASLA EPDFVTDFA KFSRPAQLHI GFQALHQFCA QHGRPPRPRN EEDAAELVAL AQAVNARALP AVQQNNLDED LIRKLAYVAA GDLAPINAFI GGLAAQEVMMK ACSGKFMPIM QWLYFDALEC LPEDKEVLTE DKCLQRQNR DGQVAVFGSD LQEKLGKQKY FLVGAGAIGC ELLKNFAMIG LGC GEGEII VTDMDTIEKS NLNRQFLFRP WDVTKLKS DT AAAAVRQMNP HIRVTSHQNR VGP DTERIYD DDFQNL DGV ANALDNVDAR MYMDRRCVYY RKPLLESGTL GTKGNVQVI PFLTESYSSS QDPPEKSIPI CTLKNFPNAI EHTLQWARDE FEGLFKQPAE NVNQYLTDPK FVERTLRLAG TQPLEVLEAV QRSLVLQRPQ TWADCVTWAC HHWHTQYSNN
-----------	--

IRQLLHNFPF DQLTSSGAPF WSGPKRCPHP LTFDVNNPLH LDYVMAAANL FAQTYGLTGS  
QDRAAVATFL QSVQVPEFTP KSGVKIHVSD QELQSANASV DDSRLEELKA TLPSPDKLPG  
FKMYPIDFEK DDDSNFHMDF IVAASNRAE NYDIPSADRH KSKLIAGKII PAIATTTAAV  
VGLVCLELYK VVQGHRQLDS YKNGFLNLAL PFFGFSEPLA APRHQYYNQE WTLWDRFEVQ  
GLQPNGEEMT LKQFLDYFKT EHKLEITMLS QGVSMYSFF MPAAKLKERL DQPMTEIVSR  
VSKRKLGRHV RALVLELCCN DESGEDVEVP YVRYTIR

**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 UBA1 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.

## 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:	UBA1
Alternative Name:	UBA1 ( <a href="#">UBA1 Products</a> )
Background:	Catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation through the ubiquitin-proteasome system (PubMed:1606621, PubMed:1447181). Activates ubiquitin by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a ubiquitin-E1 thioester and free AMP (PubMed:1447181). Essential for the formation of radiation-induced foci, timely DNA repair and for response to replication stress. Promotes the recruitment of TP53BP1 and BRCA1 at DNA damage sites (PubMed:22456334). {ECO:0000269 PubMed:1447181, ECO:0000269 PubMed:1606621, ECO:0000269 PubMed:22456334}.
Molecular Weight:	118.7 kDa Including tag.
UniProt:	<a href="#">P22314</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
---------	--------

## 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)