

# Recombinant human UBA3 protein

Catalog Number: ATGP1425

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-463aa

### UniProt No.

Q8TBC4

### NCBI Accession No.

AAH22853

### Alternative Names

NEDD8-activating enzyme E1 catalytic subunit, uBE1C

## PRODUCT SPECIFICATION

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### Molecular Weight

54.4 kDa (487aa)

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 1mM DTT

### Purity

> 90% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

uBA3, also known as NEDD8-activating enzyme E1 catalytic subunit, is the catalytic subunit of the dimeric uBA3-NAE1 E1 enzyme. E1 activates NEDD8 by first adenylating its C-terminal glycine residue with ATP, thereafter linking this residue to the side chain of the catalytic cysteine, yielding a NEDD8-uBA3 thioester and free AMP. E1 finally transfers NEDD8 to the catalytic cysteine of uBE2M. Recombinant human uBA3 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

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## Amino acid Sequence

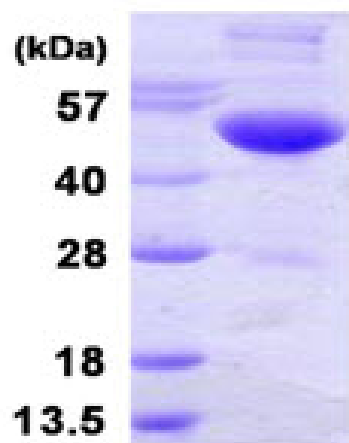
MGSSHHHHHH SSSLVPRGSH MGSHMADGEE PERKRRRIEE LLAEKMAVDG GCGDTGDWEG RWNHVKKFLE  
RSGPFTHPDF EPSTESLQFL LDTCKVLVIG AGGLGCELLK NLALSGFRQI HVIDMDTIDV SNLNRQFLFR PKDIGRPKAE  
VAAEFLNDRV PNCNVVPHFN KIQDFNDFY RQFHIIVCGL DSIARRWIN GMLISLLNYE DGVLDPSSIV PLIDGGTEGF  
KGNARVILPG MTACIECTLE LYPPQVNFPM CTIASMPRLP EHCIEYVRML QWPKEQPFGE GVPLDGDDPE HIQWIFQKSL  
ERASQYNIRG VTYRLTQGVV KRIIPAVAST NAVIAAVCAT EVFKIATSAY IPLNNYLVFN DVDGLYTYTF EAERKENCPA  
CSQLPQNIQF SPSAKLQEV L DYL TNSASLQ MKSPAITATL EGKNRTLYLQ SVTSIEERTR PNL SKTLKEL GLVDGQELAV  
ADV TTPQTVL FKLHFTS

## General References

Gong L., et al. (1999) J. Biol. Chem. 274:12036-12042  
Bohnsack R.N., et al. (2003) J. Biol. Chem. 278:26823-26830

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)