

## 32-2877: UBA3 Recombinant Protein

**Alternative Name :** NEDD8-activating enzyme E1 catalytic subunit, NEDD8-activating enzyme E1C, Ubiquitin-activating enzyme E1C, Ubiquitin-like modifier-activating enzyme 3, Ubiquitin-activating enzyme 3, UBA3, UBE1C, hUBA3.

### Description

Source : Escherichia Coli. UBA3 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 487 amino acids (1-463) and having a molecular mass of 54.4kDa. UBA3 is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. NEDD8-activating enzyme E1 catalytic subunit (UBA3) is the catalytic subunit of the dimeric UBA3-NAE1 E1 enzyme, which belongs to the E1 ubiquitin-activating enzyme family. E1 activates NEDD8 by initially adenylating its C-terminal glycine residue with ATP, afterwards linking this residue to the side chain of the catalytic cysteine, generating a NEDD8-UBA3 thioester and free AMP. E1 at last transfers NEDD8 to the catalytic cysteine of UBE2M. The UBA3 enzyme connects with AppBp1, an amyloid beta precursor protein binding protein, to form a heterodimer, and at that point the enzyme complex activates NEDD8, a ubiquitin-like protein, which controls cell division, signaling and embryogenesis.

### Product Info

**Amount :** 20 µg  
**Purification :** Greater than 90.0% as determined by SDS-PAGE.  
**Content :** The UBA3 solution (1mg/ml) contains 20mM Tris-HCl buffer (pH8.0), 20% glycerol and 1mM DTT.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SSSLVPRGSH MGSMDGEE PERKRRRIEE LLAEKMAVDG GCGDTGDWEG  
RWNHVKKFLE RSGPFTHPDF EPSTESLQFL LDTCKVLVIG AGGLGCELLK NLALSGFRQI HVIDMDTIDV  
SNLNRQFLFR PKDIGRPKAE VAAEFLNDRV PNCNVVPHFN KIQDFNDTFY RQFHIIVCGL DSIIARRWIN  
GMLISLLNYE DGVLDPSSIV PLIDGGTEGF KGNARVILPG MTACIECTLE LYPPQVNFPM CTIASMPRLP  
EHCIEYVRML QWPKEQPFGE GVPLDGDDE HIQWIFQKSL ERASQYNIRG VTYRLTQGVV KRIIPAVAST  
NAVIAAVCAT EVFKIATSAY IPLNNYLVFN DVDGLYTYTF EAERKENCPC CSQLPQNIQF SPSAKLQEV  
DYLTNASASLQ MKSPAITATL EGKNRTLYLQ SVTSIEERTR PNLKTLKEL GLVDGQELAV ADVTTPQTVL  
FKLHFTS.

