



Recombinant Human Ubiquitin-like Modifier-activating Enzyme 1 (UBA1)

Catalog #MB7208

Product Description

Recombinant Human Ubiquitin-like modifier-activating enzyme 1 (UBA1/UBE1) is a member of the ubiquitin-activating E1 enzyme family and plays an essential role in the initiation of the ubiquitin-proteasome pathway. UBA1 catalyzes the first step of ubiquitin activation by using ATP to adenylate the C-terminal glycine residue of ubiquitin, followed by formation of a high-energy thioester bond between ubiquitin and an active-site cysteine residue within UBA1. The activated ubiquitin is subsequently transferred to E2 ubiquitin-conjugating enzymes for further conjugation to target proteins.

UBA1 is the predominant E1 enzyme responsible for ubiquitin activation in mammalian cells and is required for a wide range of cellular processes, including protein degradation, DNA damage response and repair, cell-cycle regulation, and maintenance of cellular homeostasis.

This recombinant protein contains an N-terminal Strep tag with TEV cleavage site and C-terminal 6×His tag for convenient purification and downstream applications.

Specifications

Synonyms:	UBA1,UBE1,Ubiquitin-Activating Enzyme E1, E1
AA Sequence:	MGWSHPQFEK GSENLVFQGA SMSSSPLSKK RRVSGPDPKP GSNCSPAQSV LSEVPSVPTN GMAKNGSEAD IDEGLYSRQL YVLGHEAMKR LQTSSVLVSG LRGLGVEIAK NIILGGVKAV TLHDQGTAQW ADLSSQFYLR EEDIGKNRAE VSQPRLAELN SYVPVTAYTG PLVEDFLSGF QVVVLTNTPL EDQLRVGEFC HNRGIKL VVA DTRGLFGQLF CDFGEEMILT DSNGEQPLSA MVSMVTKDNP GVVTCLEEAR HGFESGDFVS FSEVQGMVEL NGNQPM EIKV LGPYTFSICD TSNFSDYIRG GIVSQVKVPK KISFKSLVAS LAEPDFVVTDFAKFSRPAQL HIGFQALHQF CAQHGRPPRP RNEEDAAELV ALAQAVNARA LPAVQQNNLD EDLIRKLAYV AAGDLAPINA FIGGLAAQEV MKACSGKFMP IMQWLYFDAL ECLPEDKEVL TEDKCLQRQN RYDGQVAVFG SDLQEKLGKQ KYFLVGAGAI GCELLKNFAM IGLGCGEGGE IIVTDMDTIE KSNLNRQFLF

	RPWDVTKLKS DTAAAVRQM NPHIRVTSHQ NRVGPDTERI YDDDFQNLG GVALDNDV ARMYMDRRCV YYRKPLLESG TLGKGNVQV VIPFLTESYS SSQDPPEKSI PICTLKNFPN AIEHTLQWAR DEFEGFLFKQP AENVNQYLTD PKFVERTLRL AGTQPLEVLE AVQRSVLQR PQTWADCVTW ACHHWHTQYS NNIRQLLHNF PPDQLTSSGA PFWSGPKRCP HPLTFDVNNP LHLDYVMAAA NLFAQTYGLT GSQDRAAVAT FLQSVQVPEF TPKSGVKIHV SDQELQSANA SVDDSRLEEL KATLPSPDKL PGFKMYPIDF EKDDDSNFHM DFIVAASCLR AENYDIPSAD RHKSKLIAGK IIPAIATTTA AVVGLVCLEL YKVVQGHRQL DSYKNGFLNL ALPFFGFSEP LAAPRHQYYN QEWTWDRFE VQGLQPNGEE MTLKQFLDYF KTEHKLEITM LSQGVSMLYS FFMPAAKLKE RLDQPMTEIV SRVSKRKLGR HVRALVLELC CNDESGEDVE VPYVRYTIRS LEHHHHHH
Source:	<i>Escherichia coli</i>
Molecular Weight:	121.4 kDa, a single non-glycosylated polypeptide chain containing 1088 amino acids
Purity	> 90%

Storage Buffer and Concentration

20 mM Tris-HCl pH 7.5, 50 mM NaCl, 2 mM β -ME, 50% Glycerol. See product label for protein concentration.

Quality Control

The purity of UBA1 was verified by SDS-PAGE.

Product Use

ScienCell's UBE1 is for research use only. It is not approved for human or animal use, or for application in clinical or in vitro diagnostic procedures.

Shipping and Storage

The product is shipped on dry ice. Upon receipt, store at -20°C in a manual defrost freezer.