

Human recombinant Ubiquitin Activating Enzyme E1

CATALOG #:	6429-50	50 µg
ALTERNATE NAMES:	UBE1, UBA1, POC20, A1S9T, A1ST, AMCX1, GXP1, SMAX2	
MOL. WEIGHT:	118 kDa	
PURITY:	>95% by SDS-PAGE	
FORMULATION:	In 50 mM Tris (pH 8.0), 100 mM NaCl and 10% glycerol.	
ACTIVITY:	Typical enzyme concentration of 5 nM – 100 nM is used for in vitro conjugation, depending on conditions.	
STORAGE CONDITIONS:	Aliquot and store at -80°C. Avoid repeated freezing and thawing cycles.	

DESCRIPTION:

UBE1, the ubiquitin activating enzyme, is the first enzyme utilized in the pathway to conjugate ubiquitin onto target substrates through an ubiquitin-protein isopeptide bond. The C-terminal glycine of an ubiquitin (G76) is initially adenylated in an ATP dependent manner activating it so it can be transferred to the active site cysteine of UBE1 forming an ubiquitin-UBE1 thiolester. With the help of the other enzymes in the ubiquitin conjugation pathway (E2/E3 enzymes) the ubiquitin is transferred to a specific lysine on a target substrate.

APPLICATIONS:

- Essential enzyme for *in vitro* ubiquitin chain synthesis and ubiquitylation reactions
- Discover inhibitors of E1 function

RELATED PRODUCTS:

- Human recombinant UCHL1 (Cat. No. 6306-100)
- Human recombinant UCHL3 (Cat. No. 6358-100)
- Human recombinant UCHL5 (Cat. No. 6359-100)
- UbcH1, human recombinant (GST-tag) (Cat. No. 4846-10, -100)
- UbcH5a, human recombinant (His-tag) (Cat. No. 4851-10, -100)
- UbcH5b, human recombinant (His-tag) (Cat. No. 4852-10, -100)
- UCHL1, human recombinant (GST-tag) (Cat. No. 4855-50)
- Human recombinant UBE2D3 (UbcH5c) (Cat. No. 6430-3)
- Human recombinant UBE2L3 (UbcH7) (Cat. No. 6431-3)
- Human recombinant UBE2K (UbcH1) (Cat. No. 6432-3)
- Yeast recombinant Ubc13 (UBE2N) (Cat. No. 6433-3)
- Yeast recombinant Mms2 (UEV-2) (Cat. No. 6434-3)
- Human recombinant UBE2D2 (UbcH5b) (Cat. No. 6435-3)
- Human recombinant UBE2R1 (CDC34) (Cat. No. 6436-3)
- Human recombinant UBE2R2 (Ubc3B) (Cat. No. 6437-3)
- Human recombinant UBE2E2 (UbcH8) (Cat. No. 6438-3)
- Human recombinant UBE2E3 (UbcH9) (Cat. No. 6439-3)
- Human recombinant UBE2H (UbcH2) HIS (Cat. No. 6440-3)
- Human recombinant UBE2H (UbcH2), HIS₆SUMO (Cat. No. 6441-3)

FOR RESEARCH USE ONLY! Not to be used in humans.