

UBE2C

Recombinant Human Ubiquitin (G76A Mutation)

Catalog No.	CRU104A CRU104B CRU104C	Quantity:	5 µg 20 µg 1.0 mg
Alternate Names:	Ubiquitin, Ribosomal Protein S27a, CEP80, UBA80, UBCEP1, UBCEP80, HUBCEP80, RPS27A, Ubiquitin G76A.		
Description:	<p>The conserved 76 amino acid protein ubiquitin (Ub) regulates a host of intracellular processes through its enzymatic conjugation to other cellular proteins. Ubiquitination occurs through sequential steps catalyzed by activating (E1), conjugating (E2), and ligase (E3) enzymes. The final step results in the formation of an isopeptide bond between Ub's C-terminal glycine residue (G76) and a lysine residue of the target protein, although N-terminal ubiquitination is also known. Outcomes of this modification include destabilization of the conjugated protein, altered protein trafficking and functional modulation. After targeting the protein for specific localizations, ubiquitin is released from the substrate by deubiquitinating enzymes. A mutant ubiquitin, having a Gly to Ala substitution at the C-terminus (G76A ubiquitin) supported several downstream reactions of the proteolytic pathway but inhibits the deubiquitination process. As a consequence, the Ub derivative becomes irreversibly conjugated to protein, shifting the equilibrium between the bound and unbound form in the direction of conjugation, at the expense of the free form.</p> <p>Recombinant Human Ubiquitin featuring a Gly76 to Ala76 mutation inhibits ubiquitin hydrolases and prevents the removal of ubiquitin from protein ubiquitin conjugates. Ubiquitin G76A is purified by ion-exchange chromatography.</p>		
Physical Appearance:	Sterile Filtered clear solution.		
GenelD:	11065		
Source:	<i>E. coli</i>		
Formulation:	Diluted in PBS + 5% glycerol.		
Purity:	> 95% as determined by SDS-PAGE.		
Storage & Stability:	Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months. Avoid repeated freezing and thawing cycles.		

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