

Recombinant Full Length Human Ubiquitin Protein, Aldehyde Labeled

Cat. No. Ubiquitin-13HFL **Lot. No.** (See product label)

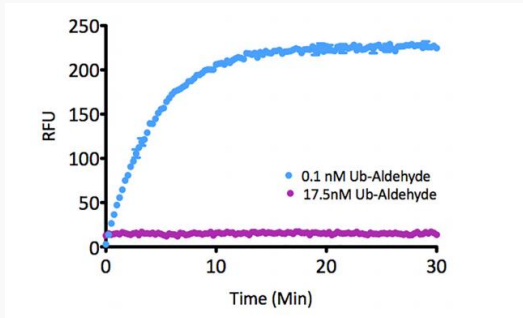
SPECIFICATION

Product Overview	This product consists of a full-length human, mature ubiquitin polypeptide (amino acids 1-76), expressed in E. coli with a c-terminal warhead (Aldehyde).
Species	Human
Source	E.coli
ProteinLength	1-76aa
Description	Ubiquitin is a small (8.5 kDa) regulatory protein that has been found in almost all tissues of eukaryotic organisms. The addition of ubiquitin to a substrate protein is called ubiquitination or ubiquitylation. Ubiquitination can affect proteins in many ways; it can signal for their degradation via the proteasome, alter their cellular location, affect their activity, and promote or prevent protein interactions. Removal of ubiquitin from a substrate protein occurs via deconjugating enzymes, of which there are nearly 100 known enzymes with various linkage specificities. Ubiquitin- Aldehyde is a potent, irreversible, and specific inhibitor of deubiquitinating enzymes (DUBs) based on a C-terminal electrophilic Aldehyde group. It targets three of the four major DUB families: UCH (Ubiquitin c-terminal hydrolases), USP (Ubiquitin Specific Proteases), OTU (Ovarian Tumor Proteases), and MJD (Machado-Josephin domain proteases) while JAMM metalloproteases are not inhibited.
Conjugation/Label	Aldehyde

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	8.6 kDa
Purity	>97% by LCMS
Usage	Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human Ubiquitin-Aldehyde concentration of 1-5 μ M.
Applications	Ub-Aldehyde can be used for activity profiling experiments and determining DUB inhibitor specificity.
Notes	For Research Use Only, Not For Use In Humans.
Storage	Store at -80 centigrade after product arrival. Avoid multiple freeze/thaws. It is recommended to make multiple aliquots after the first thaw.
Storage Buffer	50mM NaOAc pH 5.0
Concentration	350uM, 3.1 mg/mL
Substrate Properties	Protein-Based Substrate. Typical experimental concentration 1-5 μ M.
Kinetic Activity	

UCHL3 activity with Ubiquitin-AMC measured in the presence of 17.5 nM and 0.1 nM Ubiquitin Aldehyde.