

## Product Information

<b>Description:</b>	Recombinant human Ubiquitin (Polyubiquitin-C), encompassing amino acids 2-76(end). This construct contains a C-terminal sortase signal (LPETG) followed by an His-tag(6xHis). The protein was affinity purified.
<b>Background:</b>	Covalent conjugation to ubiquitin (Ub) is one of the major post-translational modifications that regulates protein stability, function, and localization. Ubiquitination is the concerted action of three enzymes: a Ub-activating enzyme (E1), a Ub-conjugating enzyme (E2), and a Ub ligase (E3). The specificity and efficiency of ubiquitination are largely determined by the E3 enzyme, which directs the last step of the Ub-conjugating cascade by binding to both an E2~Ub conjugate and a substrate protein. This step ensures the transfer of Ub from E2~Ub to the substrate, leading to its mono- or poly-ubiquitination. Methylated ubiquitin is a derivative of ubiquitin where the lysine residues have undergone methylation. It can bind to substrates and block the formation of polyubiquitination chains.
<b>Species:</b>	Human
<b>Construct:</b>	Ubiquitin (2-76-His)
<b>Concentration:</b>	1.24 mg/ml
<b>Expression System:</b>	<i>E. coli</i>
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 20% glycerol, and 128 mM imidazole
<b>MW:</b>	10 kDa
<b>Genbank Accession:</b>	NM_021009
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
<b>Applications:</b>	Useful for SDS-PAGE and as control in sortase-based reactions. This protein is not appropriate for assays that require a glycine present at the C-terminus.

## Quality Control Data

## 4-20% SDS-PAGE Coomassie Staining

