

# Ubiquitin, human recombinant

Cat. No. SBB-UP0013  
Lot. No. 163060013

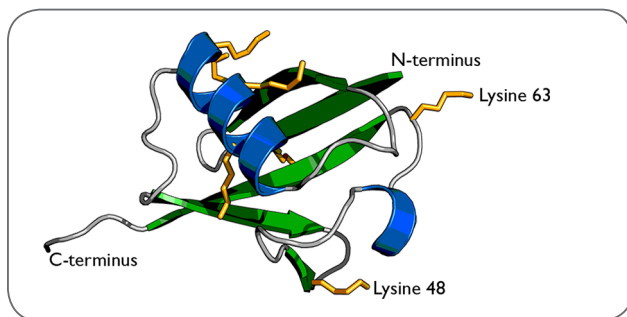


# South Bay Bio

## Ubiquitin

Ubiquitin is a 76 amino acid post-translational modifier expressed throughout all tissues in eukaryotic organisms. The many roles of ubiquitin modification include proteasomal degradation, signal transduction, inflammatory response, and DNA damage repair. Ubiquitin modification occurs through a pyramidal cascade of an E1 activating enzyme, E2 conjugating enzymes, and an E3 ubiquitin ligases. This enzymatic cascade results in modification of a 3-amine of a lysine residue on a substrate protein. Substrates may either be mono or poly-ubiquitinated by M1, K6, 11, 27, 29, 33, 48 or 63 linkages. Removal of ubiquitin from a substrate protein occurs via deconjugating enzymes, of which there are nearly 100 known enzymes with various linkage specificities.

This product consists of a full-length human, mature ubiquitin polypeptide (amino acids 1-76), expressed in *E.coli*. Typical working concentrations range from 250 to 750  $\mu$ M.



## References

- 1) Huang F., Kirkpatrick D., Jiang X., Gygi S.P., Sorkin A. "Differential regulation of EGF receptor internalization and degradation by multiubiquitination within the kinase domain." *Mol. Cell* 21:737-748(2006)
- 2) Komander D. "The emerging complexity of protein ubiquitination." *Biochem. Soc. Trans.* 37:937-953(2009)

## Product Information

**Quantity:** 10 mg      **Molecular Weight:** 8.6 kDa

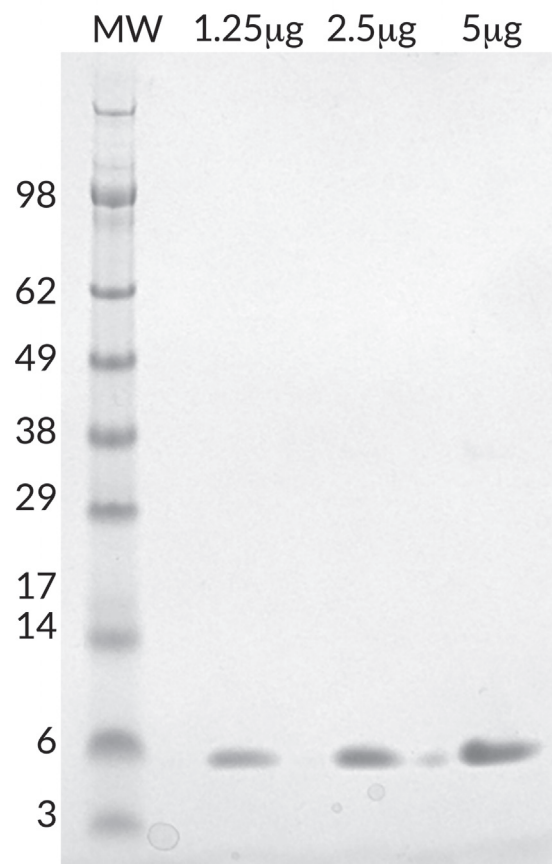
**Concentration:** 2.76 mM, 23.5 mg/mL

**Purity:** >95% by SDS-PAGE

**Storage Buffer:** 50 mM HEPES pH 7.5

**Storage:** -80C, Avoid multiple freeze / thaw

## Quality Control and Performance Data



**Ubiquitin SDS-PAGE.** From left to right, increasing amounts of ubiquitin loaded onto a 4-12% SDS-PAGE gel, stained with coomassie brilliant blue. Purity is > 95%.

**For Research Use Only, Not For Use In Humans.**

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