

MATERIAL DATA SHEET**Biotinylated poly-Ubiquitin Chains (2-7) (K63-linked)****Cat. # UCB-330**

Poly-Ubiquitin chains are composed of Ubiquitin monomers that are covalently linked through isopeptide bonds, which typically form between a lysine residue of one Ubiquitin molecule and the C-terminal glycine residue of another Ubiquitin molecule. Each human Ubiquitin monomer is 76 amino acids (aa) in length and shares 96% and 100% aa identity with yeast and mouse Ubiquitin, respectively. Linkage through specific lysine residues is thought to serve as a signal that affects protein degradation, signaling, trafficking, and other cellular processes (3-8).

This mixture of poly-Ubiquitin chains contains di-Ubiquitin and higher MW species; mono-Ubiquitin has been removed. These chains have been modified with biotin via primary amine coupling, resulting in multiple biotinylated species modified at the N-terminus, as well as lysine residues. Biotinylated Ubiquitin can be detected using avidin-linked reagents. This mixture of poly-ubiquitin chains contains di-ubiquitin and higher MW species; mono-ubiquitin has been removed. These chains have been modified with biotin via primary amine coupling. This results in multiple biotinylated species modified at the N-terminus, as well as lysine residues. Biotinylated ubiquitin can be detected using avidin-linked reagents.

Product Information

Quantity:	50 µg
Stock:	X mg/ml in 50 mM HEPES pH 8.0
Purity:	> 95% by SDS-PAGE
MW:	17 kDa (Ub2), 26 kDa (Ub3), 34 kDa (Ub4), 43 kDa (Ub5), 52 kDa (Ub6), and 60 kDa (Ub7) □

Use & Storage

Use:	K63-linked Biotinylated poly-Ubiquitin Chains are ideal for use in assays that utilize avidin-linked reagents for visualization or quantitation. Reaction conditions will need to be optimized for each specific application.
Storage:	Store at -20°C to -80°C. Avoid multiple freeze/thaw cycles.

Literature

- References:** Behrends, C. & J.W. Harper (2011) Nat. Struct. Mol. Biol. **18**: 520
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Scheffner, M. *et al.* (1995) Nature **373**: 81
Tong, X. *et al.* (2012) J. Biol. Chem. **287**: 25280
Wei, W. *et al.* (2004) Nature **428**: 194
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