

MATERIAL DATA SHEET**His₆-Ubiquitin w/K63 only N-Term Biotin, *human recombinant*****Cat. # UB-HK630**

Produced via a proprietary process resulting in a single biotin modification exclusively on the N-terminus of ubiquitin. This site-specific modification results in an ubiquitin that is fully functional at the C-terminus, and with the full compliment of reactive lysines to allow for poly-ubiquitin chain incorporation. Detection with avidin-linked reagents allows for a higher efficiency and detection sensitivity than with anti-ubiquitin antibodies. Ideal as an alternative to radio-labeled ubiquitin. This ubiquitin mutant contains only a single lysine (K63) with all other lysines mutated to arginine, and is able to form poly-ubiquitin chains with other ubiquitin molecules via the K63 lysine only.

Product Information

Quantity:	50 µg, lyophilized powder
Stock:	Soluble in aqueous buffer up to 20 mg/ml.
MW:	8.6 kDa
Purity:	> 95% by PAGE

Use & Storage

Use: Depending on desired signal strength and assay conditions, biotin-N-term Ub should be used in conjunction with native ubiquitin at combined concentration range of 10-50 µM with a 1:2 to 1:20 ratio of biotin-N-term Ub: native Ub, respectively. Typical amounts for a 20 µL reaction: 250 ng to 2 µg biotin-N-term-Ub, 5 µg native ubiquitin. Poly-ubiquitin chain visualization/quantitation can be performed via avidin-linked detection.

Storage: Store at -20°C once reconstituted. Avoid multiple freeze/ thaw cycles.

Literature

References: Corsi D., *et al.* (1995) *J. Biol. Chem.* **270**:8928-8935
Mitsui A., *et al.* (1999) *PNAS* **96**:6054-6059
Mimnaugh E.G. *et al.* (1999) *Electrophoresis* **29**:418-428

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