

**MATERIAL DATA SHEET****Poly-Ubiquitin WT Chains (K63-linked)  
Cat. # UC-316**

Linkage specific penta-Ub can be used to investigate mechanism of binding and recognition by E1 or E2 enzymes, deubiquitinating enzymes, E3 ligases, the proteasome or other proteins that contain ubiquitin-associated domains (UBAs) or ubiquitin-interacting motifs (UIMs). This product is formed with wild-type ubiquitin and linkage-specific enzymes. It has been shown that the rate of ubiquitin-substrate conjugate degradation is related to poly-ubiquitin chain length. Tetra-ubiquitin is the minimal unit required for recognition by the proteasome, and longer chains probably have enhanced binding to proteasomal subunits and may be more resistant to disassembly by a proteasome-associated isopeptidases.

**Product Information**

<b>Quantity:</b>	25 µg, lyophilized powder
<b>Solubility:</b>	Aqueous solutions up to 5 mg/ml
<b>Purity:</b>	> 90% by SDS-PAGE
<b>MW:</b>	43 kDa

**Use & Storage**

<b>Use:</b>	Typical concentrations will depend on specific assay conditions and method of detection.
<b>Storage:</b>	Solubilized solution at -20°C. Avoid multiple freeze/thaw cycles.

**Literature**

<b>References:</b>	Beal R.E., <i>et al.</i> (1996) <u>Proc. Natl. Acad. Sci. USA.</u> <b>93</b> :861-866
	Beal R.E., <i>et al.</i> (1998) <u>Biochem.</u> <b>37</b> :2925-2934
	Deveraux Q., <i>et al.</i> (1994) <u>J. Biol. Chem.</u> <b>269</b> :7059-7061
	Piotrowski J., <i>et al.</i> (1997) <u>J. Biol. Chem.</u> <b>272</b> :23712-21.
	Wang Q., <i>et al.</i> (2005) <u>J. Mol. Biol.</u> <b>348</b> :727-739

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