

MATERIAL DATA SHEET**His₆-Ubiquitin Mutant K48R, *human recombinant*****Cat. # UM-HK48R** (Formerly U-520)

Mutation of lysine 48 to arginine renders ubiquitin (Ub) unable to form poly-Ub chains via lysine 48 linkages with other Ub molecules. Ub K48R can form an E1-catalyzed active thioester at the C-terminus allowing the molecule to be transferred to the lysines of substrate proteins (mono-ubiquitination). Ideal for the reduction in poly-Ub chain length/conjugation rates and for the determination of poly-Ub chains specificity.

Product Information

Quantity:	1 mg, lyophilized powder.
MW:	9.3 kDa
Solubility:	Soluble and stable in aqueous buffers up to 10 mg/ml.
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical concentrations for non rate-limiting support of <i>in vitro</i> conjugation reactions range from 200 μ M-1 mM depending on experimental conditions.
Storage:	Store at -20°C after solubilization in desired buffer. Avoid multiple freeze/thaw cycles.

Literature

References:	Chau V., <i>et al.</i> (1989) <i>Science</i> 243 :1576-1583
	Baboshina D.V., <i>et al.</i> (1996) <i>J.Biol.Chem.</i> 271 :2823-2831
	Finley D., <i>et al.</i> (1994) <i>Mol. Cell. Biol.</i> 14 :5501-5509
	Johnson E.S., <i>et al.</i> (1992) <i>EMBO.J</i> 11 :497-5055
	Johnson E.S., <i>et al.</i> (1995) <i>J.Biol.Chem.</i> 270 : 17442-17756

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