

MATERIAL DATA SHEET**Ubiquitin Mutant V70A, human recombinant****Cat. # UM-V70A**

Ubiquitin has a distinct and functionally important hydrophobic patch whose surface is defined by three residues including Leu⁸, Ile⁴⁴ and Val⁷⁰. These residues are solvent accessible in ubiquitin chains and are critical for poly-ubiquitin chain interaction and recognition by the 26S proteasome and subsequent target degradation. These hydrophobic residues interact directly with various factors that bind to Ub and/or mediate Ub-Ub interactions in ubiquitin chains that may influence orientation and recognition. Ubiquitin V70A can form an E1-catalyzed active thioester at the C-terminus allowing the molecule to be transferred to the lysines of substrate proteins.

Product Information

Quantity:	1 mg, lyophilized powder
MW:	8.5 kDa
Solubility:	Soluble and stable in aqueous buffers up to 5 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 µM-1 mM depending on experimental conditions.
Storage:	Store at -20°C after solubilization in desired buffer. Avoid multiple freeze/thaw cycles.

Literature

References:	Beal R., <i>et al.</i> (1996) <u>Proc. Natl. Acad. Sci. USA.</u> 93 :861-866
	Beal R., <i>et al.</i> (1998) <u>Biochemistry.</u> 37 :2925-2934
	Lam Y., <i>et al.</i> (1997) <u>J. Biol. Chem.</u> 272 :28438-28446
	Mueller T.D. and Feignon J. (2002) <u>J. Mol. Biol.</u> 319 :1243-1255
	Sloper-Mould K.E., <i>et al.</i> (2001) <u>J. Biol. Chem.</u> 276 :30483-30489
	Varadan R., <i>et al.</i> (2002) <u>J. Mol. Biol.</u> 324 :637-647

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