

MATERIAL DATA SHEET**FLAG (DYKDDDDK)-Ubiquitin, *human recombinant***
Cat. # U-120

This fully functional N-terminal FLAG-tagged ubiquitin protein allows for the convenient detection or affinity purification of ubiquitinated proteins *in vitro*. The epitope tag is a hydrophilic octapeptide (DYKDDDDK) derived from the sequence of the bacteriophage 7 gene-10 product. This tag is specifically recognized by anti-FLAG antibodies M1, M2 or M5. Ubiquitin is a 76 amino acid, highly conserved nuclear and cytoplasmic protein. It is found exclusively in eukaryotes, becomes covalently attached to substrate proteins by enzymes in the Ubiquitin-Proteasome Pathway (UPP) and has a major role in targeting cellular proteins for the ATP-dependent degradation by the 26S proteasome. Ubiquitination also affects proteasome-independent events such as protein localization, activity and function.

Product Information

Quantity:	1 mg, lyophilized powder
MW:	9.3 kDa
Solubility:	Aqueous solutions up to 10mg/ml
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical concentration to support <i>in vitro</i> conjugation is 500 μ M to 1 mM depending on conditions
Storage:	Lyophilized powder at 4°C. Solubilized stock solution at -20°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Coux O., <i>et al.</i> (1996) <u>Ann. Rev. Biochem.</u> 65 : 801-847 Einhauer A. and Jungbaer A. (2001) <u>J. Chromatog.</u> 921 :25-30 Einhauer A. and Jungbaer A. (2001) <u>J. Biochem. Biophys. Meth.</u> 49 :455-465 Hopp, T., <i>et al.</i> (1988) <u>Biotechnology.</u> 6 :1204-1210 Knappik A., <i>et al.</i> (1994) <u>Biotechniques.</u> 17 :754-761 Prickett K., <i>et al.</i> (1989) <u>Biotechniques.</u> 7 :580-589 Slootstra J.W., <i>et al.</i> (1997) <u>Mol. Divers.</u> 2 :156-164 Witzgall R., <i>et al.</i> (1994) <u>Anal. Biochem.</u> 223 :291-8
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