

MATERIAL DATA SHEET

SUMO-1 K7R K17R mutant, *human recombinant*

Cat. # ULM-718

Human SUMO-1 does not contain the exact ψ KXE consensus sequence found in SUMO-2 and SUMO-3. Within this motif ψ represents a large hydrophobic amino acid (I, L, or V), K is the lysine that becomes modified, X is any residue and E is glutamic acid. Many known SUMO-1 conjugation sites occur within this consensus sequence, but SUMOylation also occurs on lysine residues located within non-consensus regions. SUMO-1 has been shown to form chains *in vitro* and *in vivo* but often the linkage is uncharacterized, and the function of SUMO chains has not yet been fully elucidated. SUMO-1 multimerization *in vitro* has been shown to occur predominantly via lysines K7, K16 and K17. Mutation of lysines 7 and 17 to arginine is useful to investigate mono-SUMOylation requirements or to reduce poly-SUMO chain formation

Product Information

Quantity:	250 μ g
Stock:	X mg/ml (X μ M) in 50 mM HEPES pH 8.0, 150 mM NaCl, 1mM DTT. Actual concentration varies with lot number.
MW:	11.1 kDa
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical <i>in vitro</i> concentrations for conjugate formation is 10-50 μ M depending on conditions.
Storage:	Store at -80°C once reconstituted. Avoid multiple freeze/thaw cycles.

Literature

References:	Bencsath K. P., <i>et al.</i> (2002) <i>J. Biol. Chem.</i> 277 : 47938–47945
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