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MATERIAL DATA SHEET

Recombinant Human Poly SUMO3 Hydrolysis Resistant Chains (3-8)
Cat. # ULN-320

Sentrin protease (SENP)-resistant poly-SUMO3 chains can be used to investigate mechanisms of chain recognition by SUMO-targeted ubiquitin ligases (STUbl's) or other proteins that contain SUMO-interacting domains (SIM's). These K11-linked chains are formed enzymatically with recombinant SUMO3 containing a mutation of glutamine 89 to proline, which renders them approximately 500-fold more resistant to disassembly by SENP's than are wild-type chains. Mono- and di-SUMO3 have been removed from the chain mixture.

Product Information	
Quantity:	50 µg
MW:	31 kDa ($SUMO3_3$), 42 kDa ($SUMO3_4$), 52 kDa ($SUMO3_5$), 63 kDa ($SUMO3_6$), 73 kDa ($SUMO3_7$), 84 kDa ($SUMO3_8$)
Source:	*E. coli*-derived Accession # P55854 Each SUMO3 contains a Pro substitution at position 89.
Stock:	X mg/ml in 50 mM HEPES pH 8.0, 100 mM NaCl, 1 mM DTT
Purity:	>90%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage	
Use:	The function of SUMO chains is an area of intense research. K11-linked Hydrolysis-resistant Poly-SUMO3 Chains (3-8) are 500-fold more resistant to SENP disassembly than wild type chains and may be useful for investigating SUMO-binding proteins. Reaction conditions will need to be optimized for each specific application.
Storage:	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 6 months from date of receipt, -20 to -70 °C as supplied. • 3 months, -20 to -70 °C under sterile conditions after opening.

Literature

References:

1. Bekes, M., *et al.* (2011), J. Biol. Chem. **286**: 10238
2. Bekes, M., *et.al.* (2013) Cell Rep. **5**: 826
3. Bylebyl G.R., *et al.* (2003) J. Biol. Chem. **278**: 44113
4. Dohmen R. J. (2004) Biochem. Biophys. Acta. **1695**:113
5. Johnson E. (2004) Ann. Rev. Biochem. **73**: 355
6. Tatham M.H., *et al.* (2001) J. Biol. Chem. **276**: 35368

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