MMS2

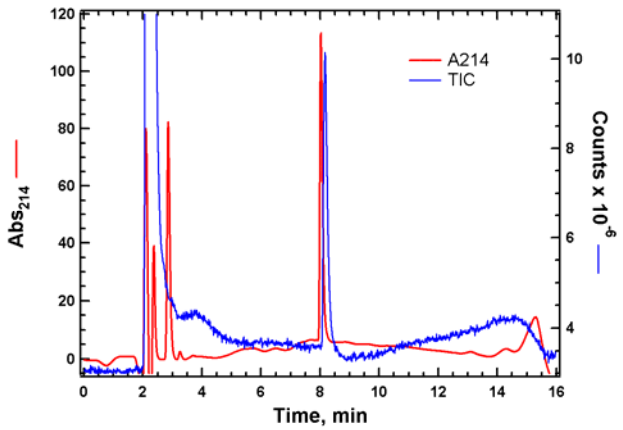
Cat. # UB226

Background: Mms2 is a UEV (ubiquitin E2 variant) protein that acts with the E2 enzyme Ubc13 in a heterodimeric complex which assembles K63-linked polyubiquitin chains utilized in non-degradative ubiquitin signaling pathways (DNA repair, signal transduction). The UEV proteins are structurally similar to E2 enzymes displaying the same fold, but lacking the active site cysteine of the E2. The Ubc13/Mms2 complex is unique in that it is has the ability to form free K63-linked polyubiquitin chains in solution in the absence of an E3.

Application: Ubiquitin ligation reactions

Product Information

Organism	*Saccharomyces cerevisiae*, recombinant; Accession No. P53152
Purity:	≥ 95% by RP-HPLC
Molecular Weight:	15,544.9 Da by MS (calculated 15,544.7)
Tag	none
Physical State:	Liquid, 50 mM Tris, pH 7.5; 150 mM NaCl; 10 mM DTT; 10% glycerol
Quantity:	20 or 75 μL of a 40 μM solution (0.8 or 3 nmoles, respectively)
Solubility:	>3 mg/mL
Storage:	-80° C. Avoid repeated freeze/thaw cycles



RP-HPLC

References

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3. VanDemark, A.P., et al., Molecular insights into polyubiquitin chain assembly: crystal structure of the Mms2/Ubc13 heterodimer. *Cell*, 2001. **105:**711-20.
4. Moraes, T.F., et al., Crystal structure of the human ubiquitin conjugating enzyme complex, hMms2-hUbc13. *Nat Struct Biol*, 2001. **8:**669-73.
5. Eddins, M.J., et al., Mms2-Ubc13 covalently bound to ubiquitin reveals the structural basis of linkage-specific polyubiquitin chain formation. *Nat Struct Mol Biol*, 2006. **13:**915-20.