

K6-Linked Tetra-Ubiquitin

Cat. # SI0604

Background:

Ubiquitin Chains are essential components in the study of protein degradation pathways, protein trafficking, and cellular signaling processes. These polymeric chains of ubiquitin molecules play critical roles in regulating protein stability, localization, and activity. K6-linked ubiquitination is traditionally associated with mitophagy and also a main contributor to the DNA damage response. These chain types are also involved in protein stabilization and other non-degradative processes.

K6 Tetra-Ubiquitin is a tetrameric chain of wild-type ubiquitin, wherein ubiquitin monomers are enzymatically linked together via an isopeptide bond between Lysine 6 and the C-terminal Glycine.

Application:

- Investigation of ubiquitin chain specificity and selectivity
- Studies on the role of ubiquitin chains in protein degradation pathways (e.g., proteasomal and autophagic degradation)
- Analysis of ubiquitin-mediated signaling pathways and cellular responses
- Structural studies to elucidate the architecture and dynamics of ubiquitin chains
- Screening assays to identify modulators of ubiquitin chain assembly and disassembly processes

Product Information

Purity:	≥ 95% by HPLC-MS
Molecular Weight:	34233 Da
Physical State:	Liquid, 50 mM Tris, pH 7.5, 0.15 M NaCl
Quantity:	100 µg
Solubility:	>1 mg/mL
Storage:	-80° C. Avoid repeated freeze/thaw cycles

References

1. Swatek, K.N. & Komander, D. Ubiquitin Modifications. *Cell Res.* **2016**, 26, 399-422.
2. Yau, R. & Rape, M. The increasing complexity of the ubiquitin code. *Nat. Cell. Bio.* **2016**, 18, 579-586.

Data

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