K63 TUBE (Magnetic Beads)

Cat. # UM404M

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Background

The K63 Magnetic TUBE is an ideal reagent for the efficient isolation and enrichment of K63-polyubiquitinated proteins from cell and tissue extracts or in vitro synthesized mixtures. This TUBE consists of multiple ubiquitin interaction motifs (UIMs) joined by a rigid, helical linker that spaces the UIMs for selective binding to extended K63-linked polyubiquitin chains. The result is a TUBE that exhibits high-affinity binding to K63-linked polyubiquitin together with 1000 to 10,000-fold selectivity over K48- and K11- linkages. The K63 TUBE allows for isolation of K63-linked polyubiquitin without the need for overexpression of ubiquitin mutants, tagged ubiquitin chains or the inclusion of DUB inhibitors, any of which could alter cellular physiology.

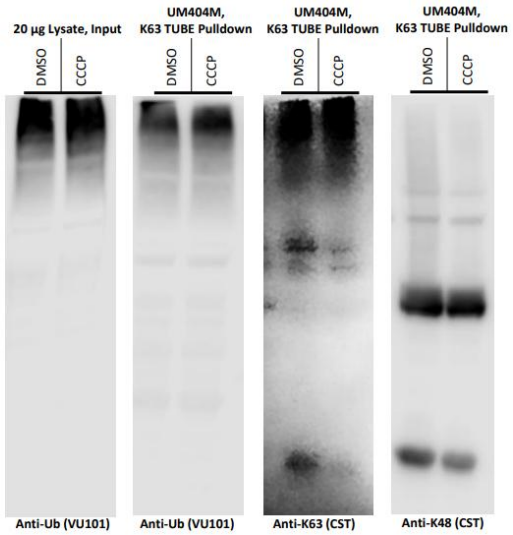
Application(s)

- Pulldown of polyubiquitinated proteins from cell lines, tissues, and organs
- Protection of polyubiquitinated proteins from both deubiquitylation and degradation by the proteasome

Product Specifications

Affinity Tag	None
Purity	(prior to coupling) ≥ 95% by RP-HPLC
Quantity	1ml
Expression System	*E. coli*
Physical State	Liquid
Buffer	PBS
Stability & Storage	≥1 year at +4°C. Avoid freezing

Product QC



References

1. Garadi Suresh H et al., Mol Cell, 2024;84(12):2337-2352
2. Chen X., et al., Cell, 2023;186 (18):3903-3920.e21.
3. Reynolds SD., et al., JCI Insight, 2022;7(15): e157380.
4. Kadimisetty K., et al., Methods Mol Biol, 2021;2365:185-202.