

Magnetic Beads-TUBE1 (High Capacity) Cat. # UM501M

Background:

Based on protein domains known to possess an affinity for ubiquitin, Tandem Ubiquitin Binding Entities (TUBEs) have been developed for the isolation and identification of ubiquitylated proteins. TUBEs display up to a 1000-fold increase in affinity for poly-ubiquitin moieties over the single ubiquitin binding associated domain (UBA). In addition, TUBEs display a protective effect on polyubiquitylated proteins, allowing for detection at relatively low abundance. These properties effectively "capture" protein in its polyubiquitin state.

UM501M was designed by coating polymeric high-capacity magnetic beads to allow superior enrichment of poly-ubiquitylated proteins along with minimizing non-specific binding to proteins in tissue and cellular lysates.

Application:

- Pull down of poly-ubiquitylated proteins from cell lines, tissues, and organs
- Protection of poly-ubiquitylated proteins from both deubiquitylation and degradation by the proteasome

Product Information

Affinity tag: N/A

Purity: (prior to coupling) > 95% by SDS-PAGE

Molecular Weight: not applicable

Physical State: Liquid

Quantity: 1mL magnetic beads

Solubility: not applicable

Storage: +4 °C. Avoid storage at lower temperatures.

References

Hjerpe, R, Aillet, F, Lopitz-Otsoa, F, Lang, V, England, P, and Rodriguez, MS., Efficient protection and isolation of ubiquitylated proteins using tandem ubiquitin-binding entities. EMBO Rep. 10,1250-1258 (2009).

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Sarbanes, Stephanie L., Vincent A. Blomen, Eric Lam, Søren Heissel, Joseph M. Luna, Thijn R. Brummelkamp, Erik Falck-Pedersen, H-Heinrich Hoffmann, and Charles M. Rice. (2021) "E3 ubiquitin ligase Mindbomb 1 facilitates nuclear delivery of adenovirus genomes." Proceedings of the National Academy of Sciences 118, no. 1: e2015794118.

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