

M1 TUBE Magnetic Beads

Cat. # UM406M

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 ubiquitinated proteins. TUBEs display up to a 1000-fold increase in affinity for polyubiquitin moieties over the single ubiquitin-binding associated domain (UBA). In addition, TUBEs display a protective effect on polyubiquitylated proteins, allowing detection at relatively low abundance. TUBEs effectively "capture" proteins in their polyubiquitinated state.

Magnetic M1 TUBE is based on UBA from the protein ubiquitin. The affinity of M1 TUBE for M1-linked tetra-ubiquitin is approximately 10-fold higher than for K48 linked chains.

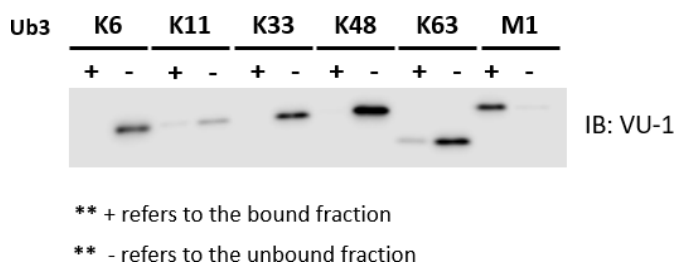
Application(s)

- Pull down of polyubiquitylated proteins from cell lines, tissues and organs
- Isolation and enrichment of M1-polyubiquitinated proteins from cell and tissue extracts
- Protection of poly-ubiquitylated proteins from both deubiquitylation and degradation by the proteasome

Product Specifications

Tag	None
Purity	(prior to coupling) > 95% by RP-HPLC 22994 Da
Quantity	1ml
Expression System	<i>E. Coli</i>
Physical State	Liquid
Buffer	PBS
Stability & Storage	Over 1 year at 4°C. Avoid freezing

Product QC



Western blot showing various polyubiquitin-linked chains pulled down using their corresponding TUBE-conjugated magnetic beads and probed with the monoclonal anti-ubiquitin antibody VU101 (clone VU-1).

References

1. Kadimisetty K., et al., Methods Mol Biol, 2021;2365:185-202.
2. Aillet, F., et al., Meth Mol Biol, 2012. 832: p. 173-183.
3. Hjerpe R., et al., EMBO Rep. 2009;10(11):1250-8.