

## Agarose-TUBE1

Cat. # UM401

**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.

Agarose-TUBE 1 is based on UBA from the protein ubiquilin. The affinity of TUBE 1 for K63 linked tetra-ubiquitin is approximately 10-fold higher than for K48 linked chains. High efficiency coupling of TUBE 1 to agarose is through a HIS6-SUMO tag, avoiding modification of the UBA domains.

- 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

<b>Affinity tag:</b>	His <sub>6</sub> -SUMO
<b>Purity:</b>	(prior to coupling) > 95% by SDS-PAGE
<b>Molecular Weight:</b>	not applicable
<b>Physical State:</b>	50% resin slurry (PBS, pH 7.5, 20% ethanol)
<b>Quantity:</b>	0.5ml resin
<b>Solubility:</b>	not applicable
<b>Storage:</b>	-20° 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).