

**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 polyubiquitinated proteins, allowing for detection at relatively low abundance. These properties effectively "capture" proteins in their polyubiquitin state.

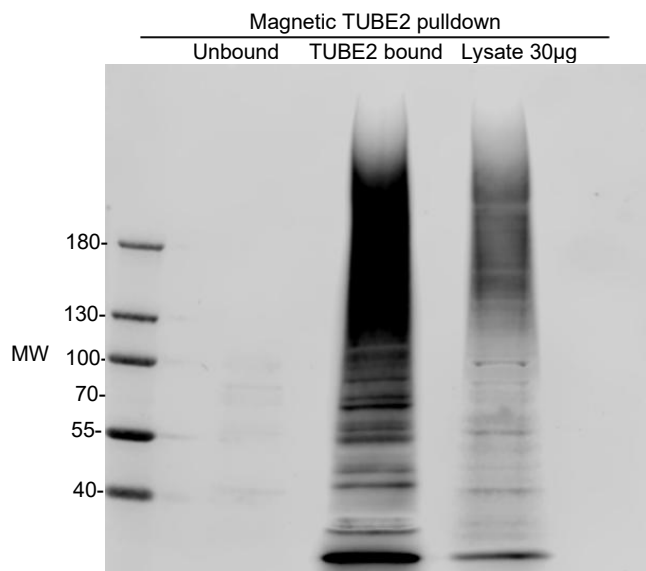
The affinity of solution phase TUBE 2 for K63 linked tetra-ubiquitin is approximately equal to K48 linked tetra-ubiquitin (5-10nM).

**Application(s)**

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

**Product Specifications**

<b>Affinity Tag</b>	None
<b>Purity</b>	(prior to coupling) $\geq 95\%$ by SDS-PAGE
<b>Quantity</b>	1ml
<b>Expression System</b>	<i>E. coli</i>
<b>Physical State</b>	Liquid
<b>Buffer</b>	PBS
<b>Stability &amp; Storage</b>	$\geq 1$ 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.

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