K48 TUBE HF (Biotin)

Cat. # UM307

LifeSensors www.lifesensors.com

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 poly-ubiquitin 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" protein in its polyubiquitin state.

K48 TUBE HF was developed to show enhanced selectivity for K48-linked polyubiquitin chains (~20 nM) over all other linkages (>2 µM). It can be used alone or in conjunction with our other TUBE products, especially K63 TUBE and M1 (linear) TUBE to investigate polyubiquitin chain linkage in your substrate protein.

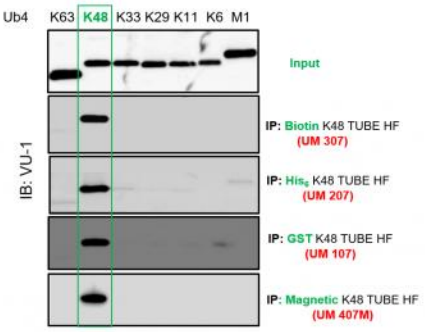
Application(s)

- Isolation and enrichment of K48-polyubiquitinated proteins from cell and tissue extracts
- Far-Western detection of K48-polyubiquitinated proteins from cell and tissue extracts
- Isolate K48-polyubiquitinated proteins for proteomic studies

Product Specifications

Affinity Tag	Biotin
Molecular Weight	23 KDa
Quantity	50 µg, 250 µg
Expression System	*E.Coli*
Physical State	Liquid
Buffer	PBS, pH 7.2
Concentration	Variable, depending on lot number
Stability & Storage	Over 1 year at -80°C. Avoid repeated freeze/thaw cycles

Product QC



VU-1: Monoclonal anti-Ubiquitin antibody (Cat# VU101)

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.
5. Gross, P. H., et al., Biochem Biophys Res Commun, 2022; 628, 68–75.