K48 TUBE HF, FLAG
Cat. # UM607

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 detection at relatively low abundance. TUBEs effectively "capture" proteins in their polyubiquitylated state [1-3].

The affinity of K48 TUBE HF for K48 linked tetra-ubiquitin is at least 100-fold higher than its affinity for all other tetra-ubiquitins.

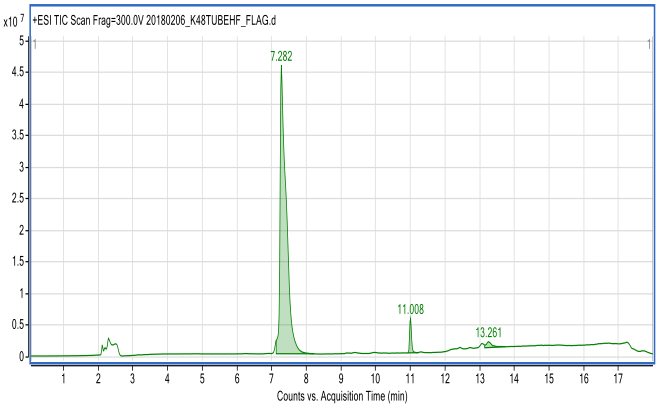
Application:

- Pull down of poly-ubiquitylated proteins from cell lines, tissues and organs
- Detection of K48-linked polyubiquitylated proteins by ligand (far Western) blotting
- Protection of poly-ubiquitylated proteins from both deubiquitylation and degradation by the proteasome

Product Information

Affinity tag:	FLAG, His6
Purity:	≥ 90% by RP-HPLC
Molecular Weight:	22994 Da
Physical State:	liquid
Quantity:	50 µg, 250 µg
Solubility:	>30 mg/mL
Storage:	-80° C. Avoid repeated freeze/thaw cycles

RP-HPLC



References

1. Altun, M., H.B. Kramer, L.I. Willems, J.L. McDermott, C.A. Leach, S.J. Goldenberg, K.G. Kumar, R. Konietzny, R. Fischer, E. Kogan, M.M. Mackeen, J. McGouran, S.V. Khoronenkova, J.L. Parsons, G.L. Dianov, B. Nicholson, and B.M. Kessler, *Activity-based chemical proteomics accelerates inhibitor development for deubiquitylating enzymes.* Chem Biol, 2011. **18**(11): p. 1401-12.
2. Hjerpe, R., F. Aillet, F. Lopitz-Otsoa, V. Lang, P. England, and M.S. Rodriques, *Efficient protection and isolation of ubiquitylated proteins using tandem ubiquitin-binding entities.* EMBO Rep, 2009. **10**: p. 1250-1258.
3. Aillet, F., F. Lopitz-Otsoa, R. Hjerpe, M. Torres-Ramos, V. Lang, and M.S. Rodriguez, *Isolation of ubiquitylated proteins using tandem ubiquitin-binding entities.* Meth Mol Biol, 2012. **832**: p. 173-183.