

MATERIAL DATA SHEET

Recombinant Human HR23A/Rad23A TUBE1 Tandem UBA (TUBE1) Biotin

Cat. # UBE-215

Human HR23A/Rad23A has two Ubiquitin-associated (UBA) motifs that can each bind Ubiquitin via a hydrophobic surface formed by residues located within the $\alpha 1$ and $\alpha 3$ helices of each UBA domain (1,2). Tandem-repeated Ubiquitin binding entities (TUBEs), which consist of multiple tandem Ubiquitin-binding UBA motifs, have been developed for the isolation and identification of ubiquitinated proteins (3). TUBEs show increased affinity for poly-Ubiquitin moieties compared to single UBA motifs (4). Additionally, TUBEs protect polyubiquitinated proteins from deubiquitylating enzymes, allowing for the detection of polyubiquitinated proteins at relatively low levels of abundance (5).

Detection with avidin-linked reagents allows for a higher efficiency and detection sensitivity than with other antibodies.

Product Information

Quantity:	250 μ g
Source:	<i>E. coli</i> -derived Accession # NP_005044.1
Stock:	X mg/ml (X μ M) in 50 mM HEPES pH 8.0, 200 mM NaCl, 2 mM TCEP
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Use & Storage

Use:	Biotin- TUBE1 can be used for the purification and identification of K63- or K48-linked Ubiquitin chains. Reaction conditions will need to be optimized for each specific application. We recommend using 50-100 μ g of Biotin- TUBE1 to detect 10-20 μ g of purified Ubiquitin chains.
Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 12 months from date of receipt, -70 °C as supplied.• 3 months, -20 to -70 °C under sterile conditions after opening.

Literature

References:

1. Chen, L. *et al.* (2001) EMBO Rep. **2**:933.
2. Wang, Q. *et al.* (2003) Biochemistry **42**:13529.
3. Hjerpe, R. *et al.* (2009) EMBO Rep. **10**:1250.
4. Hurley, J.H. *et al.* (2006) Biochem. J. **399**:361.
5. Lopitz-Otsoa, F. *et al.* (2010) Biochem. Soc. Trans. **38**:40.

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