

Lot #

BostonBiochem™

## MATERIAL DATA SHEET

### His<sub>6</sub>-hHR23A Tandem UBA (TUBE1), *human recombinant* Cat. # UBE-210

hHR23A has two UBA domains that can each bind ubiquitin in addition to an N-terminal UBL domain that binds S5a and S2, two components of the 26S proteasome. hHR23a recognizes ubiquitin through a predominately hydrophobic surface formed by residues within  $\alpha 1$  and  $\alpha 3$  of each of its UBA domains. Tandem Ubiquitin Binding Entities (TUBEs) have been developed for the isolation and identification of ubiquitinated proteins. TUBEs display increased affinity for polyubiquitin moieties over the single ubiquitin binding associated domain (UBA). TUBEs also display a protective effect on polyubiquitinated proteins, allowing for detection at relatively low abundance. This protein can be used for the enrichment, isolation and identification of K63-linked (preferentially) or K48-linked poly-Ub chains or ubiquitinated substrates that contain these linkages. This protein is His<sub>6</sub>-tagged which allows for metal chelate affinity purification and also allows for convenient immuno-detection of conjugates using His<sub>6</sub>-specific antibodies.

#### Product Information

<b>Quantity:</b>	250 $\mu$ g
<b>MW:</b>	28.33 kDa
<b>Stock:</b>	X mg/ml (X $\mu$ M) 50 mM Hepes, 200 mM NaCl, 1 mM DTT pH 8.0
<b>Purity:</b>	>95% by SDS-PAGE

#### Use & Storage

<b>Use:</b>	Use 50-100 $\mu$ g of protein to detect 2-25 $\mu$ g of purified K48-linked ubiquitin chains. The amount necessary for use in crude lysates needs to be determined empirically.
<b>Storage:</b>	Store at -80°C. Avoid multiple freeze/thaw cycles.

#### Literature

<b>References:</b>	Hjerpe, R., <i>et al.</i> (2009) <u>EMBO Reports</u> . <b>10</b> : 1250-1258 Hurley, J., <i>et al.</i> (2006) <u>Biochem. J.</u> <b>399</b> : 361-372 Masutani, C., <i>et al.</i> (1994) <u>EMBO J.</u> <b>13</b> : 1831-1843 Van der Spek, P.J., <i>et al.</i> (1994) <u>Genomics</u> . <b>23</b> : 651-658 Van der Spek, P.J., <i>et al.</i> (1996) <u>Genomics</u> . <b>31</b> : 20-27 Wang, G., <i>et al.</i> (2000) <u>Hum. Molec. Genet.</u> <b>9</b> : 1795-1803
--------------------	--

***For Laboratory Research Use Only, Not For Use in Humans***

840 Memorial Drive, Cambridge, MA 02139 Phone: 617-241-7072 FAX: 617-492-3565  
[www.bostonbiochem.com](http://www.bostonbiochem.com)