Lot #

# **MATERIAL DATA SHEET**

## His<sub>6</sub>-HR23A/Rad23A 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		
Quantity:	250 µg	
MW:	28.33 kDa	
Stock: Purity:	X mg/ml (X μM) 50 mM Hepes, 200 mM NaCl, 1 mM DTT pH 8.0 >95% by SDS-PAGE	

### **Use & Storage**

Use:	Use 50-100 µg of protein to detect 2-25 µg of purified K48-linked ubiquitin
	chains. The amount necessary for use in crude lysates needs to be determined
	empirically.

**Storage:** Store at -80°C. Avoid multiple freeze/thaw cycles.

#### Literature

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

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