

# FLAG-TUBE2 Cat. # UM602

## **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 for detection at relatively low abundance. These properties effectively "capture" protein in its polyubiquitin state.

The affinity of solution- phase TUBE2 for K63 linked tetra-ubiquitin is approximately equal to K48 linked tetra-ubiquitin (5-10nM).

# Application:

- Pull down of poly-ubiquitylated proteins from cell lines, tissues and organs
- Protection of poly-ubiquitylated proteins from both deubiquitylation and degradation by the proteasome

#### **Product Information**

Affinity tag: **FLAG** 

**Purity:** > 95% by SDS-PAGE

**Molecular Weight:** 29 kDa

**Physical State:** 50 mM HEPES (pH 7.5), 150 mM NaCl, 10% glycerol

Quantity: 200 µg, 1 mg

Storage: -80° C, avoid freeze/thaw cycles

# Western Blot – VU1

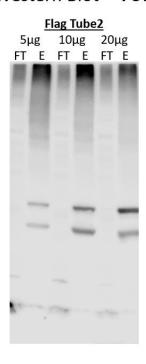


Figure 1. Anti-ubiquitin western blot of ubiquitinated protein enrichment from 5, 10, and 20 µg of lysate using FLAG-TUBE2 detailing unbound fraction (FT) and elution (E).

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## References

Hjerpe, R, Aillet, F, Lopitz-Otsoa, F, Lang, V, England, P, and Rodriguez, MS., Efficient protection and isolation of ubiquitylated proteins using tandem ubiquitin-binding entities. *EMBO Rep.* **10**,1250-1258 (2009).

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