

# K33-linked diUb

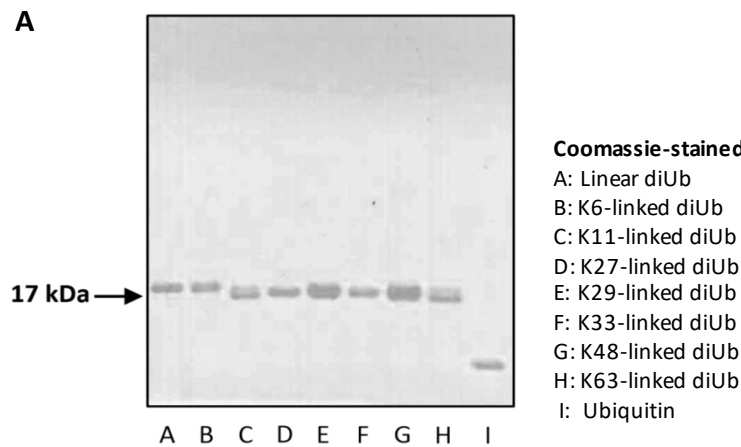
Cat. # D5410

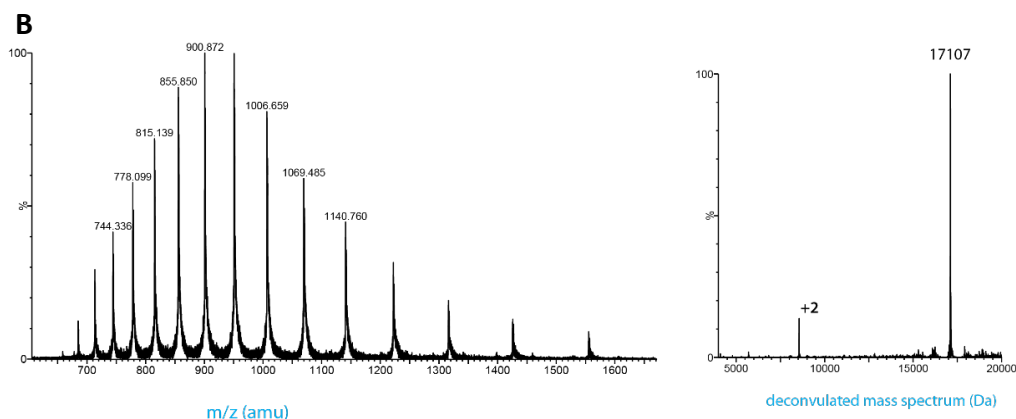
**Quantity:** 25 µg  
**Species:** Human  
**Source:** Synthetic  
**MW:** 17107 Da  
**Form:** Lyophilized powder  
**Quality Assurance:** ≥95% by RP-HPLC and SDS-PAGE  
**Sequence:**

MOIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRTLSDYNIQKESTLHLVLRRLGG  
 MOIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRTLSDYNIQKESTLHLVLRRLGG

**Description:** K33-linked diUb is a native K33 linked di-Ub which can be used as a substrate for proteases that cleave the isopeptide linkage between two ubiquitin molecules. It can also be used to investigate mechanism of binding and recognition by proteins that contain ubiquitin-associated domains or ubiquitin-interacting motifs (UIMs). This product is formed by chemical ligation.

## Images





**B: LC-MS analysis.** Mobile phase A = 1% CH<sub>3</sub>CN, 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH<sub>3</sub>CN. Phenomenex Kinetex C18, (2.1×50 mm, 2.6 μM); column T = 40°C.

**Storage:**

Powder at -20°C; Solution at -80°C. Please avoid multiple freeze/thaw cycles.

**Sample**

**Preparation**

**(Important!):**

- 1) Centrifuge the tube at 10,000 xg for 2 min to pellet the powder.
- 2) Dissolve the powder in a small amount of DMSO (e.g. 25 μg powder in 1 μL DMSO). Vortex the tube to completely dissolve the powder. Keep under room temperature for 5 min, and then centrifuge under room temperature at 10,000 xg for 2 min to collect solution to the tube bottom.
- 3) Add 49 μL cold buffer (such as 20 mM Tris, pH 7.2, 150 mM NaCl and 10% glycerol) directly into the tube bottom in once, and pipette up and down to mix (avoid generating bubbles and note the order of addition).
- 4) The stock solution is 0.5 μg/μL (29 μM).

**Literature:**

1. A. Faesen *et al.*, (2011) *Chemistry & Biology*, 18, 1550.
2. I. Dikic *et al.*, (2010) *Nature Reviews Molecular Cell Biology* 10, 659.
3. J. D. F. Licchesi *et al.*, (2012) *Nature Structural & Molecular Biology* 19, 62.
4. F. El Oualid *et al.*, (2010) *Angewandte Chemie Int. Ed.* 49, 10149.

