

K27 linked di-Ubiquitin (human sequence, synthetic)

UbiQ code : UbiQ-015
 Batch # : B01012018-001
 Amount : 50 ug, lyophilized powder
 Purity : ≥95%
 Mol. Weight : 17.11 kDa
 Storage : upon arrival, store powder at –20°C, solution at –80°C. Please avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-015 (K27 linked di-Ubiquitin) is a native K27 linked di-ubiquitin. It 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).

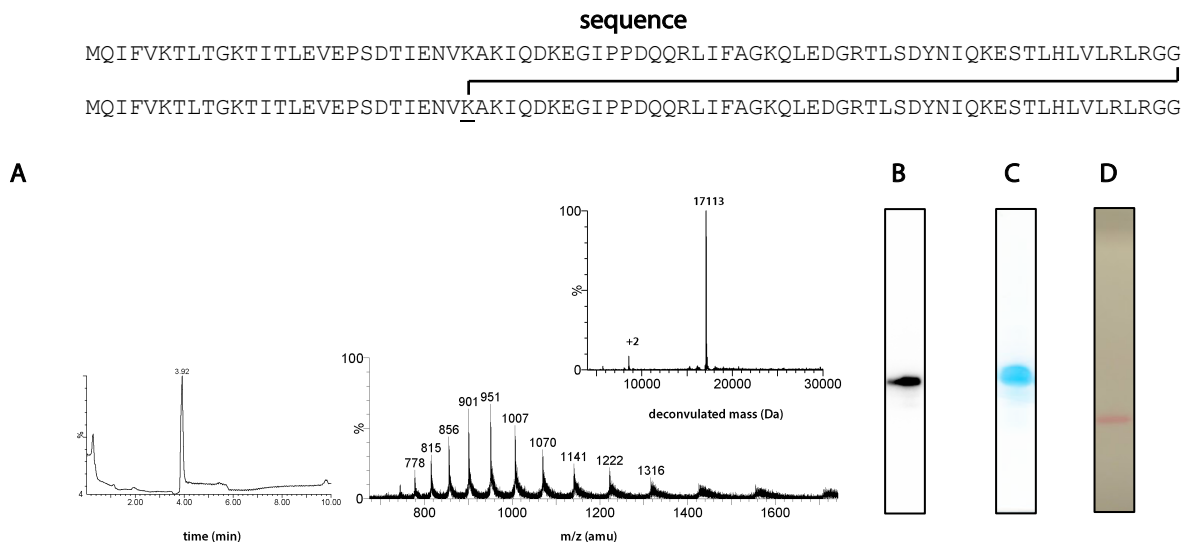


Figure 1. A: LC-MS analysis. Mobile phase A = 1% CH₃CN, 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH₃CN. XSelect CSH C18 (4.6×100 mm, 5 μM); flow rate= 0.8 mL/min, column T= 40°C. Gradient: 50-90%B over 5.5 min. B: anti-Ub blot (P4D1 antibody). C: Coomassie Brilliant Blue staining. D: Ponceau staining.

important: sample preparation

- add (for example) 2.5 μL DMSO to 50 ug di-ubiquitin and dissolve by a quick spin
- add the DMSO stock (20 mg/mL = 1169 μM) to milliQ (please note order of addition).
- buffer the aq. solution as desired
- *as an example*, dilution of the 2.5 μL DMSO stock into 92.5 μL milliQ followed by addition of 5 μL 1M HEPES affords a stock of ½ mg/mL (29 μM) in 50 mM HEPES, ±2.5 vol% DMSO.

Literature. (1) Faesen et al. *Chemistry & Biology*, **2011**, *18*, 1550. (2) Dikic et al. *Nature Rev Mol Cell Biol* **2010**, *10*, 659. (3) Licchesi et al. *Nature Struct & Mol Biol* **2012**, *19*, 62. (4) El Oualid et al. *Angew Chem Int Ed* **2010**, *49*, 10149.