

# UbiQ

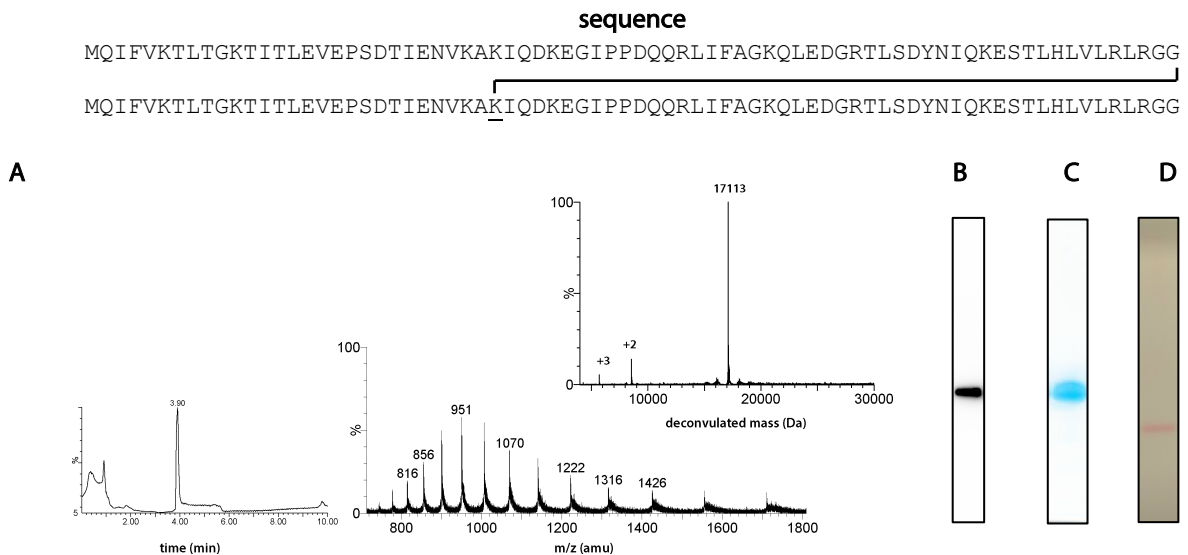
targeting the ubiquitin system

## K29 linked di-Ubiquitin (human sequence, synthetic)

UbiQ code : UbiQ-016  
Batch # : B01012018-001  
Amount : 50 ug, lyophilized powder  
Purity :  $\geq 95\%$   
Mol. Weight : 17.11 kDa  
Storage : upon arrival, store powder at  $-20^{\circ}\text{C}$ , solution at  $-80^{\circ}\text{C}$ . Please avoid multiple freeze/thaw cycles.

## Productsheet

**Background.** UbiQ-016 (K29 linked di-Ubiquitin) is a native K29 linked di-ubiquitin. It can be used as a substrate for proteases that cleave the isopeptide linkage between the two ubiquitin proteins. 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%  $\text{CH}_3\text{CN}$ , 0.1% formic acid in water (milliQ) and B= 1% water (milliQ) and 0.1% formic acid in  $\text{CH}_3\text{CN}$ . XSelect CSH C18 (4.6 $\times$ 100 mm, 5  $\mu\text{M}$ ); flow rate= 0.8 mL/min, column T=  $40^{\circ}\text{C}$ . 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  $\mu\text{L}$  DMSO to 50 ug di-ubiquitin and dissolve by a quick spin
- add the DMSO stock (20 mg/mL = 1169  $\mu\text{M}$ ) to milliQ (please note order of addition).
- buffer the aq. solution as desired
- *as an example*, dilution of the 2.5  $\mu\text{L}$  DMSO stock into 92.5  $\mu\text{L}$  milliQ followed by addition of 5  $\mu\text{L}$  1M HEPES affords a stock of  $\frac{1}{2}$  mg/mL (29  $\mu\text{M}$ ) in 50 mM HEPES,  $\pm 2.5$  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.