

## Biotin-Ahx-H2B(113-125) K120Ub (human sequence, synthetic)

UbiQ code : UbiQ-184 Batch # : B01102016-001

Amount : 50 ug, lyophilized powder

Purity : ≥95% by HPLC Mol. Weight : 10.28 kDa

Storage: upon arrival, powder at -20°C; solution at -80°C. Please avoid multiple freeze/thaw cycles.

## **Productsheet**

**Background.** UbiQ-184 is based on the H2B(113-125) peptide which is monoubiquitinated at K120 via a native isopeptide bond and modified on the N-terminus with biotin. A 6-aminohexanoic acid (Ahx) linker is used to create extra space between the biotin and H2B peptide for efficient access of biotin binding entities. It can be used as a substrate for ubiquitin proteases, to investigate mechanism of binding and recognition by proteins that contain ubiquitin-associated domains or ubiquitin-interacting motifs (UIMs) and as antigen for immunizations.

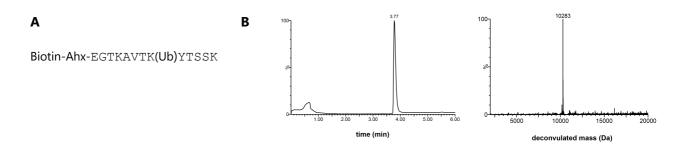


Figure 1. A: sequence. B: LC-MS analysis. Mobile phase A = 1% CH<sub>3</sub>CN, 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH<sub>3</sub>CN. XSelect CSH C18 (4.6×100 mm, 5  $\mu$ M); flow rate= 0.8 mL/min, runtime = 6 min, column T= 40°C. Gradient: 30-60%B over 5.5 min.

## important: sample preparation

- dissolve the powder in as little DMSO as possible (e.g. 20 40 mg/mL)
- add the DMSO stock slowly to milliQ (please note the order of addition)
- buffer the aq. solution as desired.

**Literature.** (1) Faesen et al. *Chem & Biol* **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.