

UbiQ

targeting the ubiquitin system

H2A (5-21) K13Ub (human sequence, synthetic)

UbiQ code : UbiQ-172

Batch # : B01012013-001

Amount : 50 ug, lyophilized powder

Purity : ≥90% by RP-HPLC

Mol. Weight : 10.36 kDa

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

Productsheet

Background. UbiQ-172 is based on an H2A(5-21) peptide which is modified at K13 via a native isopeptide bond with ubiquitin (Ub). 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.

sequence

KQGGKARAK(Ub)AKTRSSRA

Ub = MQIFVKTLTGKTTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLLGG

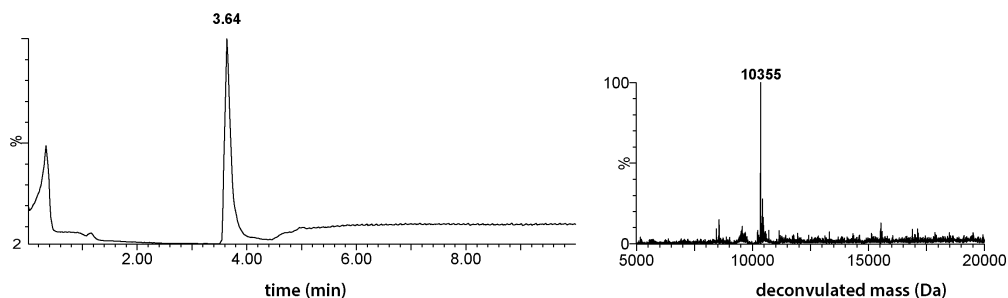


Figure 1. LC-MS analysis. Mobile phase A = 1% CH₃CN, 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH₃CN. XSelect CSH C18 (4.6×100 mm, 5 μM); flow rate= 0.8 mL/min, runtime = 6 min, column T= 40°C. Gradient: 30-60% over 5.5 min.

important: sample preparation

- dissolve the powder in as little DMSO as possible (e.g. 20 mg/mL= 1.8 mM)
- add this 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.