

Biotin-Ahx-H2B(106-125) K120 Ub (human sequence, synthetic)

UbiQ code : UbiQ-150
Batch # : B01112013-001
Amount : 50 ug , lyophilized powder
Purity : $\geq 95\%$ by RP-HPLC
Mol. Weight : 10.99 kDa
Storage : upon arrival, powder at -20°C ; solution at -80°C . Protect from light and avoid multiple freeze/thaw cycles.

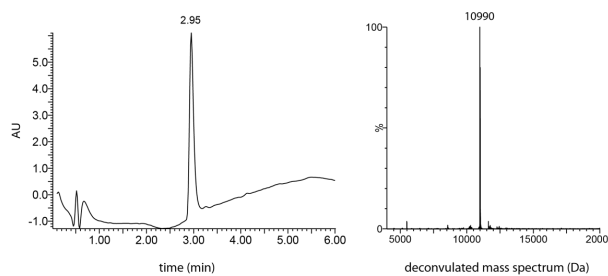
Productsheet

Background. UbiQ-150 is a H2B(106-125) polypeptide which is labeled on the N-terminus with biotin (separated by an aminohexanoic acid linker) and monoubiquitinated at K120 via a native isopeptide bond. It can be used as a substrate for deubiquitylases to investigate mechanism of binding and recognition by proteins that contain ubiquitin-associated domains or ubiquitin-interacting motifs (UIMs) and as antigen for immunizations. This product is formed by chemical ligation.

sequence

Biotin-Ahx-LAKHAVSEGTKAVTK(Ub)YTSSK

Ub = MQIFVKLTIGKTTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSLDYNIQKESTLHLVLRLLGG



LC-MS analysis. Mobile phase A = 1% CH_3CN , 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH_3CN . Phenomenex Kinetex C18, (2.1 \times 50 mm, 2.6 μM); flow rate = 0.5 mL/min, runtime = 6 min, column T = 40°C . Gradient: 5% \Rightarrow 95% over 3.5 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 (e.g. 50 mM HEPES pH 8, 100 mM NaCl)

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