

## **Biotin-Ahx-H2A(112-129) K119 Ub** (*human sequence, numbering without Met1, synthetic*)

UbiQ code : UbiQ-185  
Batch # : B01102016-001  
Amount : 50 ug, lyophilized powder  
Purity :  $\geq 95\%$  by HPLC  
Mol. Weight : 10.88 kDa  
Storage : powder at  $-20^{\circ}\text{C}$ ; solution at  $-80^{\circ}\text{C}$ . Please avoid multiple freeze/thaw cycles.

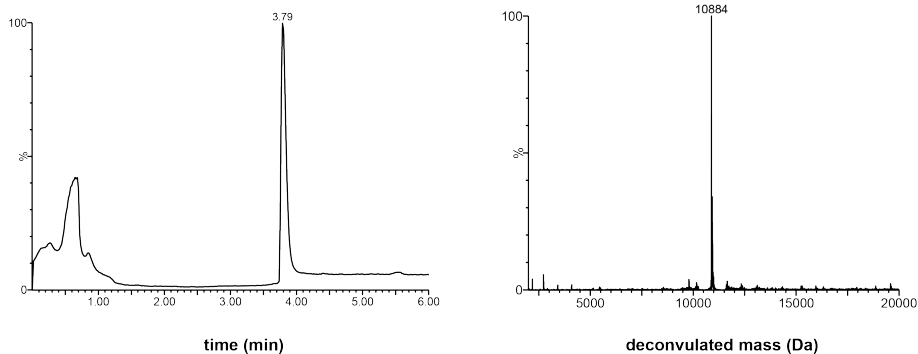
## Productsheet

**Background.** UbiQ-185 is an *N*-terminal biotinylated H2A(112-129)\* peptide which is monoubiquitinated at K119 via a native isopeptide bond. An aminohexanoic acid (Ahx) linker is used to create extra space between the biotin and H2A peptide for efficient access of biotin binding entities. This product is formed by chemical ligation.

\* numbering without Met1

### **Sequence: Biotin-Ahx-QAVLLPKK(Ub)TESHHKAKGK**

**Ub** = MQIFVKLTGKTTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLLIFAGKQLEDGRTLSDYNIQKESTLHLVLRRLRGG



**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, runtime = 6 min, column T=  $40^{\circ}\text{C}$ . Gradient: 30% $\Rightarrow$ 60% 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 (e.g. 50 mM HEPES pH 8, 100 mM NaCl)**
- **for example, a final buffered stock of 0.5 mg/mL will contain 1.25 vol% DMSO when prepared from a 40 mg/mL DMSO stock.**
- **if desired, the DMSO can be removed from the buffered stock by dialysis or 3 kDa spin-filters**

**Literature.** (1) El Oualid et al. *Angewandte Chemie Int. Ed.* **2010**, *49*, 10149.