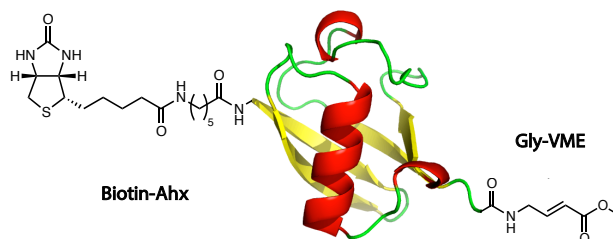


# UbiQ

targeting the ubiquitin system



## Biotin-Ahx-Ub-VME (human sequence, synthetic)

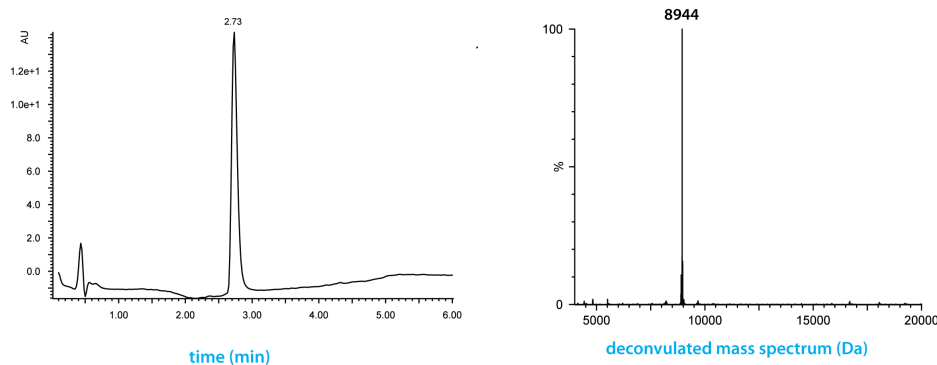
UbiQ code : UbiQ-054  
Batch # : B26112012-001  
Amount : 50 ug, lyophilized powder  
Purity :  $\geq 95\%$  by cation-chromatography and RP-HPLC  
Mol. Weight : found 8944 Da, calc 8945 Da  
Storage : powder at  $-20^{\circ}\text{C}$ , solution at  $-80^{\circ}\text{C}$ . Please avoid multiple freeze/thaw cycles.

## Productsheet

**Background.** Biotin-Ahx-Ub-VME (**UbiQ-054**) is a potent, irreversible and specific inhibitor of deubiquitinating enzymes (DUBs),<sup>1</sup> which is labeled on the N-terminus with biotin.<sup>2</sup> An aminohexanoic acid linker is used to create extra space between the biotin and Ub protein for efficient access of biotin binding entities.

### Sequence

**Biotin-Ahx-MQIFVKTLTGKTTITLEVEPSDTIENVKAKIQDKEGIPDPQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRGG-VME**



**LC-MS analysis.** Mobile phase A = 1%  $\text{CH}_3\text{CN}$ , 0.1% formic acid in water and B= 1% water and 0.1% formic acid in  $\text{CH}_3\text{CN}$ . Phenomenex Kinetex C18, (2.1 $\times$ 50 mm, 2.6  $\mu\text{M}$ ); flow rate = 0.5 mL/min, runtime = 6 min, column T =  $40^{\circ}\text{C}$ . Gradient: 5%  $\Rightarrow$  95% over 3.5 min.

## Important: sample preparation

- dissolve the powder in as little DMSO as possible (20 - 40 mg/mL)
- add the DMSO stock to milliQ (please note the order of addition) and mix
- buffer the aq. solution as desired (using 1M HEPES or 1M Tris for example)
- in general, DMSO concentrations up to 5 vol% are well tolerated by most enzymes.
- If required, total removal of DMSO is accomplished by dialysis or spin-filtration (3 kDa cut-off membrane).
- For detailed experimental conditions please see the open-access reference 1:  
<http://onlinelibrary.wiley.com/doi/10.1002/cbic.201200497/abstract>

**Literature.** (1) Misaghi et al. *J. Biol. Chem.* **2005**, *280*, 1512. (2) de Jong et al. *ChemBioChem* **2012**, *13*, 2251.