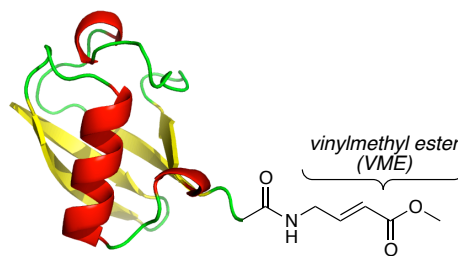


# UbiQ

targeting the ubiquitin system

## Ub-VME (human sequence, synthetic)

UbiQ code : UbiQ-005  
Batch # : B01092012-001  
Amount : 50 ug, lyophilized powder  
Purity :  $\geq 95\%$  by RP-HPLC  
Mol. Weight : 8609 Da by MS (calc Mw 8605 Da)  
Storage : upon arrival powder at  $-20^{\circ}\text{C}$ ; buffered solution at  $-80^{\circ}\text{C}$ . Please avoid multiple freeze/thaw cycles.

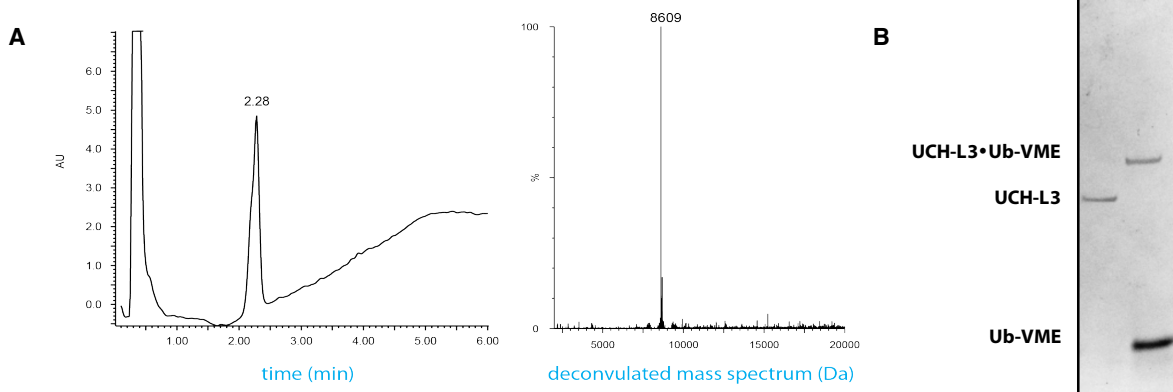


## Productsheet

**Background.** UbiQ-005 is a potent, irreversible and specific inhibitor of deubiquitinating enzymes (DUBs). It inhibits the hydrolysis of poly-ubiquitin chains on substrate proteins *in vitro* and thus enhances poly-Ub chain accumulation. UbiQ-005 functions as an activity based DUB probe and can also be used for structural biology studies of DUB-Ub complexes.<sup>1,2</sup>

### Sequence

MQIFVKLTGKTTITLEVPSDTIENVKAKIQDKEGIPPDQQLIFAGKQLEDGRTLSDYNIQKESTLHLVLRIRG-VME



**A: LC-MS analysis.** Mobile phase A= 1% CH<sub>3</sub>CN, 0.1% formic acid in milliQ and B= 1% milliQ and 0.1% formic acid in CH<sub>3</sub>CN. Phenomenex Kinetex C18, (2.1×50 mm, 2.6 μM); flow rate = 0.8 mL/min, column T = 40°C. Gradient: 5% ⇒ 95% over 3.5 min.  
**B: SDS-PAGE analysis** (12%, MES buffer) of reaction between UCH-L3 and UbiQ-005 (excess). For exp. details, see ref. 1 & 2

## Important: sample preparation

- dissolve the powder in as little DMSO as possible (e.g. 20 mg/mL)
- add this DMSO stock slowly to milliQ (please note the order of addition).
- buffer as desired (with e.g. 1M HEPES to 50 mM HEPES).
- a final buffered stock of for example 0.5 mg/mL contains 2.5 vol% DMSO; in general DMSO concentrations of up to 5 vol% are well tolerated by DUBs.
- if required, total removal of DMSO is accomplished by dialysis or spin-filtration (3 kDa cut-off membrane).

**Literature.** (1) Galardy et al. *Methods in Enzymology* **2005**, 399, 120. (2) de Jong et al. *ChemBioChem* **2012**, 13, 2251.