

# 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 : 8.61 kDa

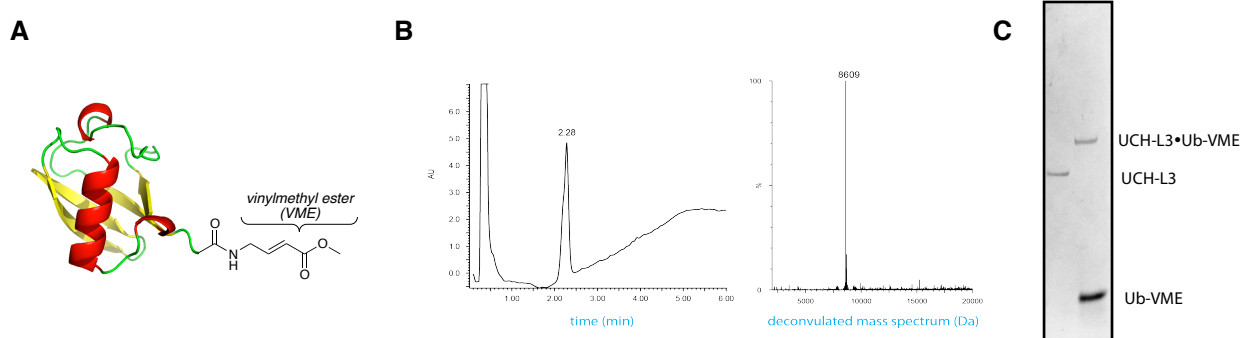
Storage : upon arrival, powder at  $-20^{\circ}\text{C}$ , buffered solution at  $-80^{\circ}\text{C}$ . Please avoid multiple freeze/thaw cycles.

## Productsheet

**Background.** UbiQ-005 is an activity-based probe for deubiquitinating enzymes (DUBs) that is based on ubiquitin functionalised with a C-terminal electrophilic vinyl methyl ester (VME). It can be used for activity profiling experiments, determining DUB inhibitor specificity and structural studies.

### sequence

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLRRLRG-VME



**Figure 1.** A: UbiQ-005. B: LC-MS analysis. Mobile phase A= 1%  $\text{CH}_3\text{CN}$ , 0.1% formic acid in milliQ and B= 1% milliQ 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 = 0.8 mL/min, column T =  $40^{\circ}\text{C}$ . Gradient: 5–95%B over 3.5 min. C: SDS-PAGE analysis (12%, MES buffer) of reaction between UCH-L3 and UbiQ-005 (excess).

### important: sample preparation

- dissolve the powder in as little DMSO as possible (e.g., 20 – 40 mg/mL)
- add this DMSO stock slowly to milliQ (please note the order of addition).
- buffer as desired

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