

Biotin-Ahx-SUMO2-VME (human sequence, C48S, synthetic)

UbiQ code : UbiQ-156 Batch # : B01072016-001

Amount : 50 ug, lyophilized powder Purity : ≥95% by RP-HPLC

Mol. Weight: 11.02 kDa

Storage : upon arrival, powder at -20°C; solution at -80°C. Please avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-156 is an activity-based probe for SUMO proteases. It is based on the SUMO2 sequence (Cys48 mutated to Ser) in which the C-terminal is equipped with an electrophilic vinyl methyl ester (VME) group. The N-terminus is labeled with biotin and an aminohexanoic acid (Ahx) linker is used to create extra space between the biotin and SUMO protein for efficient access of biotin binding entities.

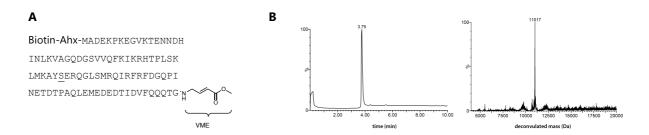


Figure 1. A: sequence. B: LC-MS analysis. Mobile phase A=1% CH₃CN, 0.1% formic acid in water (milliQ), B=1% water (milliQ) and 0.1% formic acid in CH₃CN. XBridge BEH300 C18 5 μ m 4.6x100mm; flow rate= 0.8 mL/min, runtime= 10 min, column T= 40°C. Gradient: 30-60% B over 6.5 min.

important: sample preparation

- dissolve the powder in as little DMSO as possible (e.g., 20 40 mg/mL)
- add this DMSO stock to milliQ (e.g., to 1 mg/mL= 91 uM)
- · next, buffer as desired
- for experimental details please see reference 1: https://www.onlinelibrary.wiley.com/doi/full/10.1002/anie.201803483

Literature. (1) Mulder et al. *Angew Chem Int Ed* **2018**, *57*, 8958. (2) Albrow et al. *Chem Biol* **2011**, *18*, 722. (3) Mendes et al. *Biochim Biophys Acta - Mol Cell Res* **2016**, *1863*, 139.