UbiQ
targeting the ubiquitin system

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

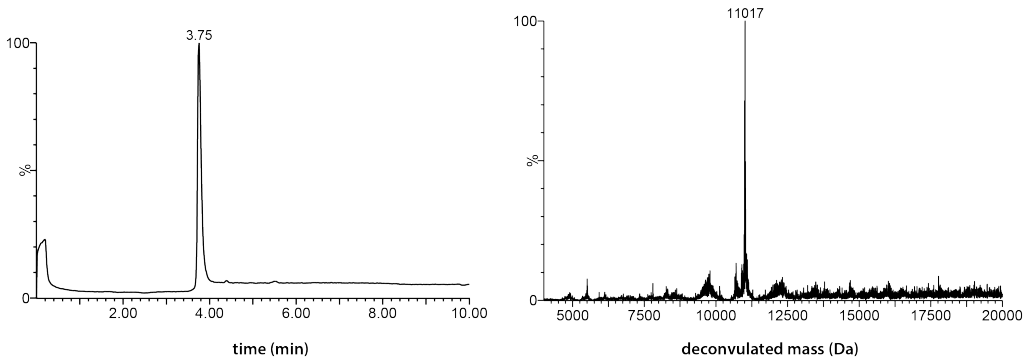
UbiQ code	:	UbiQ-156
Batch #	:	B01072016-001
Amount	:	50 ug, lyophilized powder
Purity	:	≥95% by RP-HPLC
Mol. Weight	:	11.02 kDa
Storage	:	upon arrival powder at –20°C; solution at –80°C. Please avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-156 is an activity based probe for SUMO proteases.[1,2] It is based on the SUMO2 sequence (Cys48 mutated to Ser) in which the *C*-terminal is equiped with the 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.

Sequence

Biotin-Ahx-MADEKPKEGVKTENNDHINLKVAGQDGSVVQFKIKRHTPLSKLMKAYSER QGLSMRQIRFRFDGQPINETDTPAQLEMEDEDTIDVFQQQTG-VME



LC-MS analysis. Mobile phase A = 1% CH_3CN, 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH_3CN. XBridge BEH300 C18 5µm 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. 40 mg/mL)**
- **add this DMSO stock slowly to milliQ (please note the order of addition)**
- **buffer the aq. solution as desired (final stocks of e.g. 0.5 mg/mL will contain 1.25 vol% DMSO)**
- **buffer exchange using 3 kDa spin filters or dialysis membrane allows total removal of DMSO if desired.**

Literature. (1) Albrow et al. *Chem Biol* **2011**, *18*, 722. (2) Mendes et al. Biochim Biophys Acta - Mol Cell Res **2016**, *1863*, 139.

UbiQ Bio BV
Chamber of Commerce 50023438
VAT NL822502136B01

Science Park 408
1098 XH Amsterdam
The Netherlands

t +31 20 303 1970
e info@ubiqbio.com
i www.ubiqbio.com

Rabobank
IBAN NL86RABO0150658907
BIC/SWIFT RABONL2U