UbiQ
targeting the ubiquitin system

Ub-AMC *(human sequence, synthetic)*

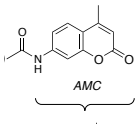
UbiQ code	:	UbiQ-001
Batch #	:	B01062020-001
Amount	:	100 ug, lyophilized powder
Purity	:	≥95%
Mol. Weight	:	8.72 kDa
Storage	:	upon arrival, powder at −20°C and solution at −80°C. Please store dark and avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-001 (UbiQ-AMC) is a quenched fluorogenic substrate for deubiquitinating enzymes. It is based on ubiquitin that is functionalised with a C-terminal 7-amido-4-methylcoumarin (AMC). Cleavage of the amide bond between the C-terminal Gly and AMC releases the fluorescent AMC dye (exc 380 nm, emi 460 nm).

sequence

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGG



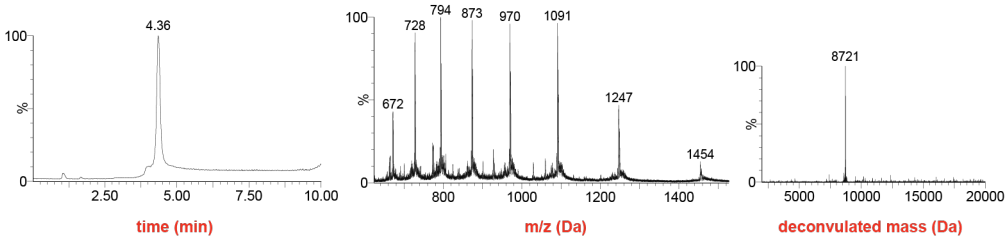


Figure 1. LC-MS analysis. Mobile phase A = 1% CH_3CN, 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH_3CN. XBridge BEH300 C18 5µm 4.6x100mm; flow rate = 0.8 mL/min, runtime = 10 min, column T = 40°C. Gradient: 20-50% B over 6.5 min.

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 the aq. solution as desired

Literature. (1) Dang et al. *Biochemistry* **1998**, *37*, 1868. (2) Mason et al. *Biochemistry* **2004**, *43*, 6535. (3) El Oualid et al. *Angew Chem Int Ed* **2010**, *49*, 10149.

UbiQ Bio BV
Chamber of Commerce 50023438
VAT NL822502136B01

Science Park 301
1098 XH Amsterdam
The Netherlands

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

Rabobank
IBAN: NL86 RABO 0150658907
BIC/SWIFT: RABONL2U