UbiQ
targeting the ubiquitin system

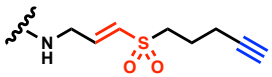

Figure 1. VPS electrophile

Ac-ISG15^{prox}-VPS *(mouse sequence, proximal domain, synthetic)*

UbiQ code : UbiQ-262
Batch # : B01042020-001
Amount : 50 ug, lyophilized powder
Purity : ≥95%
Mol. Weight : 9.37 kDa
Storage : upon arrival, powder at −20°C, solution at −80°C. Please avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-262 is an activity-based probe (ABP) for ISG15 proteases. It is based on the proximal domain of mouse ISG15 and contains a C-terminal vinyl pentynyl sulfone (VPS) electrophile (Figure 1), allowing for post-labeling modification of cross-linked [UbiQ-262]::[ISG15 protease] complexes by using click chemistry with for example biotin-azide.

sequence

Ac-SEPLSILVRNERGHSNIYEVFLTQTVDTLKKKVSQREQVHEDQFWLSFEGRPMEDKELLGEYGLKPQSTVIKHLRLRG-**VPS**

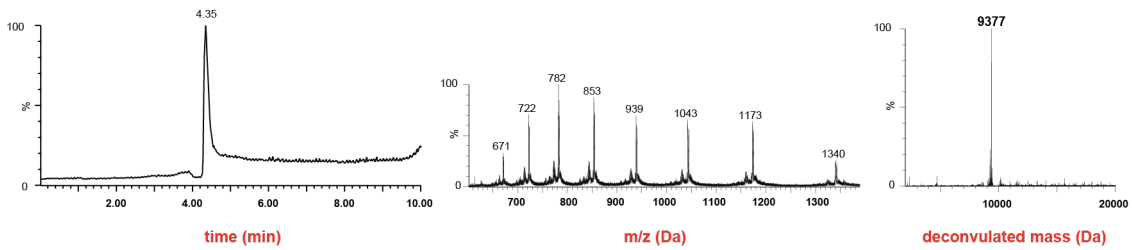

Figure 2. LC-MS analysis. Mobile phase A= 1% aq. CH_3CN and 0.1% aq. formic acid, B= 1% milliQ and 0.1% formic acid in CH_3CN. XBridge BEH300 C18, 3.5 µm, 4.6x100mm; column T= 40°C, flow= 0.8 mL/min. Gradient: 20−50%B over 6.5 min.

important: sample preparation

- dissolve the powder in DMSO
- depending on final substrate concentration, DMSO stocks may range from 1 mg/mL (107 uM) to 40 mg/mL (4.27 mM)
- add the DMSO stock to milliQ and mix
- next, buffer as desired
- for full experimental details about using VPS based probes, please see reference 3

Literature. (1) El Oualid et al. *Angew Chem Int Ed* **2010**, *49*, 10149. (2) Basters et al. *Nat Struct Mol Biol.* **2017**, 24, 270. (3) Hewing et al. *Nat Comm* **2018**, *9*, article number 1162.

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