

# UbiQ

targeting the ubiquitin system

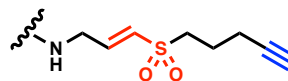


Figure 1. VPS electrophile

## Ac-ISG15<sup>prox</sup>-VPS (mouse sequence, synthetic)

UbiQ code : UbiQ-262  
Batch # : B01122018-001  
Amount : 50 µg, lyophilized powder  
Purity : purified by HPLC (≥95%)  
Mol. Weight : 9.37 kDa  
Storage : upon arrival, powder at –20°C, solution at –80°C. Please avoid multiple freeze/thaw cycles.

## Productsheet

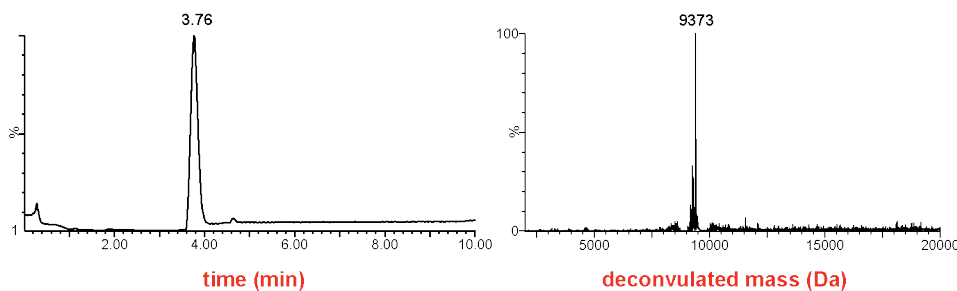
**Background.** UbiQ-262 is an activity-based probe (ABP) for ISG15 proteases. It is prepared by total chemical synthesis<sup>1</sup> and based on the proximal part of (mouse) ISG15 (aa 77-165).<sup>2</sup> It contains a C-terminal vinyl pentynyl sulfone (VPS) electrophile (Figure 1) which allows for post-labeling modification of cross-linked [UbiQ-237]:[ISG15 protease] complexes by using click chemistry with for example biotin-azide.<sup>3</sup>

### Sequence

AC-SEPLSILVRNERGHSNIYEVFLTQTVDLTKKVSQREQVHEDQFWLSFEGRPMEKELLGEYGLKPQSTVIKHLRLRG-VPS

### Important: sample preparation

- **dissolve the powder in as little DMSO as possible (e.g. 20 mg/mL)**
- **add the DMSO stock to milliQ (please note the order of addition) and mix by vortex**
- **buffer the aq. solution as desired (using 1M HEPES or 1M Tris for example)**
- **For full experimental details about using the VPS type of ABP, please see reference 2.**



**LC-MS.** Mobile phase A= 1% aq. CH<sub>3</sub>CN and 0.1% aq. formic acid, B= 1% milliQ and 0.1% formic acid in CH<sub>3</sub>CN. XBridge BEH300 C18, 3.5 µm, 4.6x100mm; column T= 40°C, flow= 0.8 mL/min. Gradient: 30–60%B over 6.5 min.

**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.