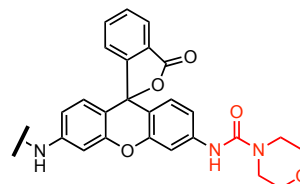


# UbiQ

targeting the ubiquitin system



**Rh110MP**

## Ac-ISG15<sup>prox</sup>-Rh110MP (mouse sequence, synthetic protein)

UbiQ code : UbiQ-127  
Batch # : B01042017-001  
Amount : bulk, lyophilized powder  
Purity : purified by HPLC (≥95% by LC-MS and SDS-PAGE)  
Mol. Weight : 9.69 kDa  
Storage : upon arrival, store powder at -20°C, solutions at -80°C. Please store in dark environment and avoid multiple freeze/thaw cycles.

## Productsheet

**Background.** Ac-ISG15<sup>prox</sup>-Rh110MP is a new type of quenched, fluorescent substrate for ISG15 proteases based on the proximal part of (mouse) ISG15 (aa 77-165).<sup>1</sup> Cleavage of the amide bond between the C-terminal Gly and rhodamine110 moiety<sup>2</sup> releases the highly fluorescent Rh110-morpholinecarbonyl (Rh110MP).<sup>3</sup>

- **keep the excellent properties of the classic ubiquitin-Rh110 substrate<sup>2</sup>**
- **with high fluorescence intensity after proteolytic cleavage**

### Sequence

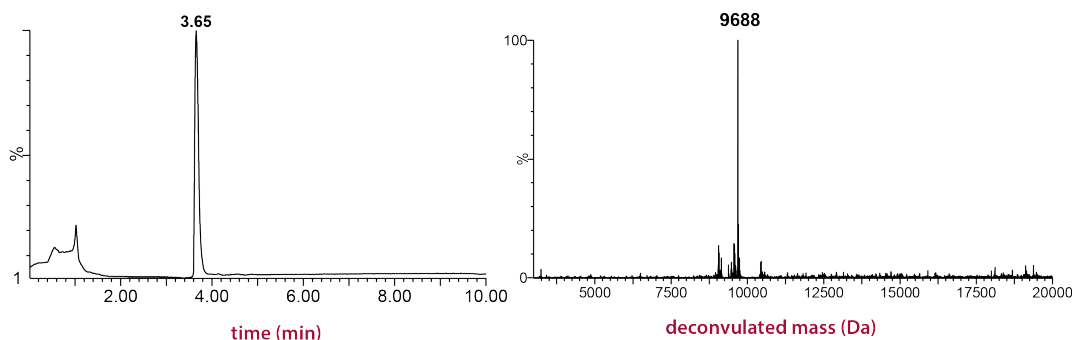
Ac-SEPLSILVRNERGHSNIYEVFLTQTVDLTKKVSQREQVHEDQFWLSFEGRPMEDEKELLGEYGLKQPSTVIKHLRLRGG-Rh110MP

### Important: sample preparation

- **dissolve the powder in DMSO: DMSO stocks can range from 1 mg/mL (103 µM) to 40 mg/mL (4.12 mM)**
- **add the DMSO stock to milliQ (please note the order of addition) and mix**
- **buffer the aq. solution as desired (using 1M HEPES or 1M Tris for example)**
- **a final assay stock of 100 nM will contain 0.1 vol% DMSO when prepared from a 100 µM DMSO stock**

### Recommended filter settings for Rh110MP

- **$\lambda_{\text{ex}} = 492 \text{ nm}$ ,  $\lambda_{\text{emi}} = 525 \text{ nm}$ , bandwidth:  $\pm 8 \text{ nm}$**



**LC-MS analysis.** Mobile phase A= 1% CH<sub>3</sub>CN, 0.1% formic acid in milliQ and 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: 40–75% over 6.5 min.

**Literature.** (1) Basters et al. *Nat. Struct. Mol. Biol.* **2017**, *24*, 270. (2) Terentyeva et al. *Bioconj. Chem.* **2011**, *22*, 1932. (3) Hassiepen et al. *Analyt. Biochem.* **2007**, *371*, 201.