UbiQ
targeting the ubiquitin system

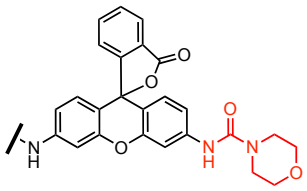


Figure 1. Rh110MP

Ac-ISG15^{prox}-Rh110MP *(mouse sequence, proximal domain, synthetic)*

UbiQ code	:	UbiQ-127
Batch #	:	B01042017-001
Amount	:	50 ug, lyophilized powder
Purity	:	≥95%
Mol. Weight	:	9.69 kDa
Storage	:	upon arrival, powder at –20°C, solution at –80°C. Please store dark and avoid multiple freeze/thaw cycles.

Productsheet

Background. Ac-ISG15^{prox}-Rh110MP is a quenched, fluorescent substrate for ISG15 proteases based on the proximal part of mouse ISG15. Cleavage of the amide bond between the C-terminal Gly and rhodamine110 moiety releases the highly fluorescent Rh110-morpholinecarbonyl (Figure 1, Rh110MP).[1]

- keep the excellent properties of the classic ubiquitin-Rh110 substrate[2]
- *with* high fluorescence intensity after proteolytic cleavage

sequence

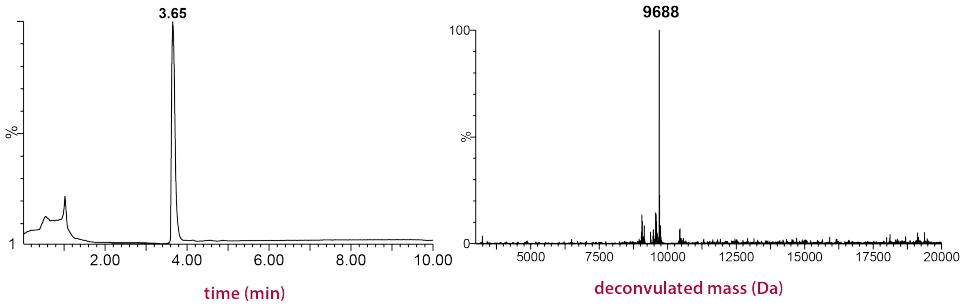
Ac-SEPLSILVRNERGHSNIYEVFLTQTVDTLKKKVSQREQVHEDQFWLSFEGRPMEDKELLGEYGLKPQSTVIKHLRLRGG-**Rh110MP**

important: sample preparation

- dissolve the powder in DMSO: DMSO stocks may range from 1 mg/mL (103 uM) 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 uM DMSO stock

recommended filter settings for Rh110MP

- λ_{ex}= 492 nm, λ_{emi}= 525 nm, bandwith: ± 8 nm



LC-MS analysis. Mobile phase A= 1% CH_3CN, 0.1% formic acid in milliQ and 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: 40–75% over 6.5 min.

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

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