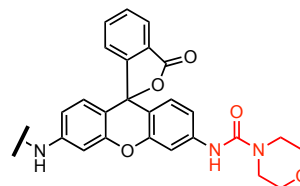


UbiQ

targeting the ubiquitin system



Rh110MP

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

UbiQ code : UbiQ-127
Batch # : B01042016-001
Amount : 25 ug, lyophilized powder
Purity : purified by HPLC (≥95%)
Mol. Weight : 9.69 kDa
Storage : (upon arrival) store powder at -20°C, solutions at -80°C.

Productsheet

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

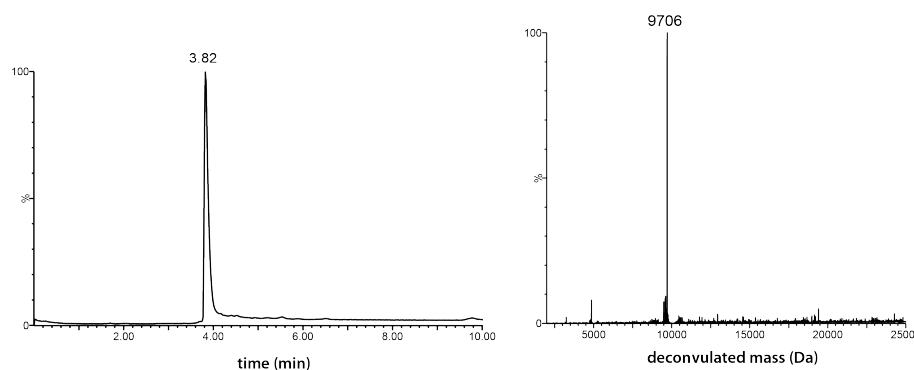
- **keep the excellent properties of the classic ubiquitin-Rh110 substrate²**
- **with high fluorescence intensity after proteolytic cleavage**

Sequence

Ac-SEPLSILVRNERGHSNIYEVFLTQTVDLTKKKVSQREQVHEDQFWLSFEGRPMEKELLGEYGLKPQSTVIKHLRLRGG-**Rh110MP**

Important: sample preparation

- **dissolve the powder in DMSO: DMSO stocks can 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: λ_{ex} = 492 nm, λ_{emi} = 525 nm, bandwidth: \pm 8 nm**



LC-MS analysis. Mobile phase A= 1% CH₃CN, 0.1% formic acid in milliQ and B= 1% milliQ and 0.1% formic acid in CH₃CN. XBridge BEH300 C18 5 μ m 4.6x100mm; column T= 40°C, flow= 0.8 mL/min. Gradient: 30–60% 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.