

Figure 1.

**Ub-Rh110Gly** (human sequence, synthetic)

UbiQ code: UbiQ-002 Batch # : B01012021-001

Amount : 100 ug, lyophilized powder

Purity : ≥95% by LC-MS MW : 8.93 kDa

Storage : upon arrival, powder at  $-20^{\circ}$ C; solution at  $-80^{\circ}$ C. Please store in dark and avoid multiple freeze/thaw cycles.

## **Productsheet**

**Background.** UbiQ-002 (Ub-Rh110Gly) is a quenched fluorogenic substrate for deubiquitinating enzymes. It is based on ubiquitin that is functionalised with a C-terminal rhodamine110Gly (Rh110Gly). Cleavage of the amide bond between the C-terminal Gly and Rh110 releases the fluorescent Rh110Gly dye (exc 485 nm, emi 535 nm, Figure 1).

## sequence

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGG-Rh110Gly

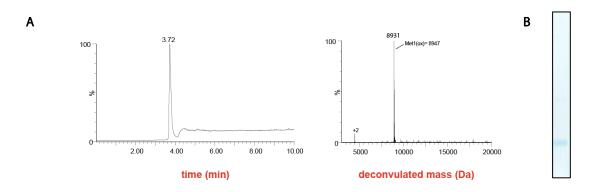


Figure 2. A: LC-MS analysis. Mobile phase A=1% CH<sub>3</sub>CN, 0.1% formic acid in milliQ and B=1% milliQ and 0.1% formic acid in CH<sub>3</sub>CN. XBridge BEH300 C18 5 $\mu$ m 4.6x100mm; column T= 40°C, flow= 0.8 mL/min. Gradient: 30–80%B over 6.5 min. B: SDS-PAGE analysis. 12% Bolt Bis-Tris Plus gel (Lifetechnologies) in MES buffer at 190V, staining with *Instant Blue*.

## important: sample preparation

- dissolve the powder in as little DMSO as possible (e.g. 20 mg/mL)
- add this DMSO stock slowly to milliQ (please note the order of addition)
- buffer the aq. solution as desired

Literature. (1) Tirat et al. Analytical Biochem 2005, 343, 244. (2) Hassiepen et al. Analytical Biochem 2007, 371, 201. (3) El Oualid et al. Angew Chem Int Ed 2010, 49, 10149.