

UbiQ

targeting the ubiquitin system

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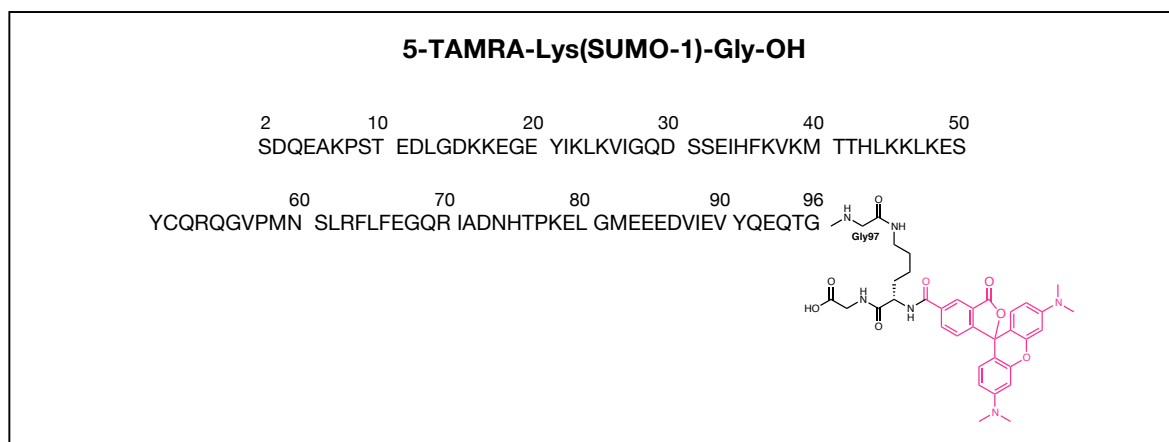
5-TAMRA-Lys(SUMO-1)-Gly-OH (human, synthetic)

UbiQ code : UbiQ-020
Batch # : B23092013-001
Protocol # : P23092013-001

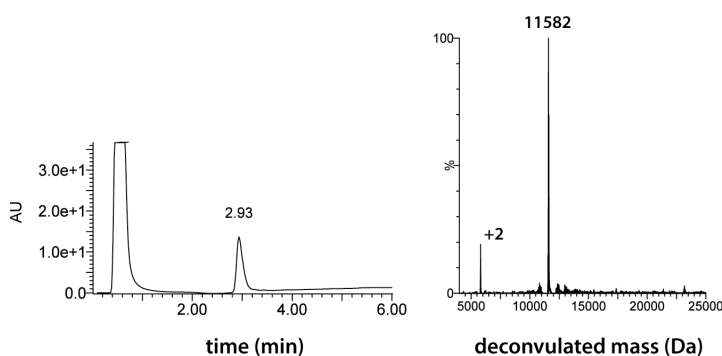
Product Information

Amount : 1.5 mg + 0.25 mg, 100 μ M in milliQ (10 vol% DMSO)
Purity : >95% by RP-HPLC
Mol. Weight : 11.58 kDa by MS
Storage : solution at -80°C . Protect from light. Please avoid multiple freeze/thaw cycles.

Background. Fluorescence polarization assay reagent for deSUMOylating enzymes which is based on a 5-carboxytetramethylrhodamine (TAMRA, exc 550 nm, emi 590 nm) modified Lys-Gly sequence that is linked to (6His tagged) SUMO-1 via a native isopeptide bond with the lysine side-chain.¹⁻⁴ A typical substrate concentration is 100 nM. Effective concentrations of deSUMOylating enzymes can range from 0.01-10 nM but depend on specific assay conditions and method of detection. **UbiQ-020** is effectively processed by SENP1.⁴



Sample preparation. The 100 μ M stock is diluted 1000 \times in buffer affording a final assay solution with 100 nM **UbiQ-020**. The DMSO concentration is now 0.01 vol%.



LC-MS analysis. Mobile phase A = 1% CH₃CN, 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH₃CN. Phenomenex Kinetex C18, (2.1 \times 50 mm), 2.6 μ M; flow rate = 0.5 mL/min, runtime = 6 min, column T = 40 $^{\circ}\text{C}$. Gradient: 5% \Rightarrow 95% over 3.5 min.

Literature. (1) Tirat, A. et al. *Anal. Biochem.* **2005**, *343*, 244-255. (2) Huang et al. *Methods in Molecular Biology* **2009**, *565*, 127. (3) Levine et al. *Anal. Biochem.* **1997**, *247*, 83. (4) Geurink and El Oualid et al. *ChemBiochem*, **2012**, *13*, 293.

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2013

Amsterdam, The Netherlands