UbiQ
targeting the ubiquitin system

5-TAMRA-Lys-Gly-OH

UbiQ code : UbiQ-023
Batch # : B01112014-001
Amount : 25 ug, lyophilized powder
Mol. Weight : 615.7 Da
Storage : upon arrival, powder at −20°C, solution at −80°C. Store dark and avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-023 is a fluorescence polarization control reagent based on a 5-tetramethylrhodamine-Lys-Gly sequence (Figure 1A). It can be used to make a concentration calibration curve and determine the grating factor (G) by using a polarization value (L) of 50 mP and formula (I):

$$G = \frac{average\ S}{average\ P} \cdot \frac{1 - (\frac{L}{1000})}{1 + (\frac{L}{1000})} \qquad (I)$$

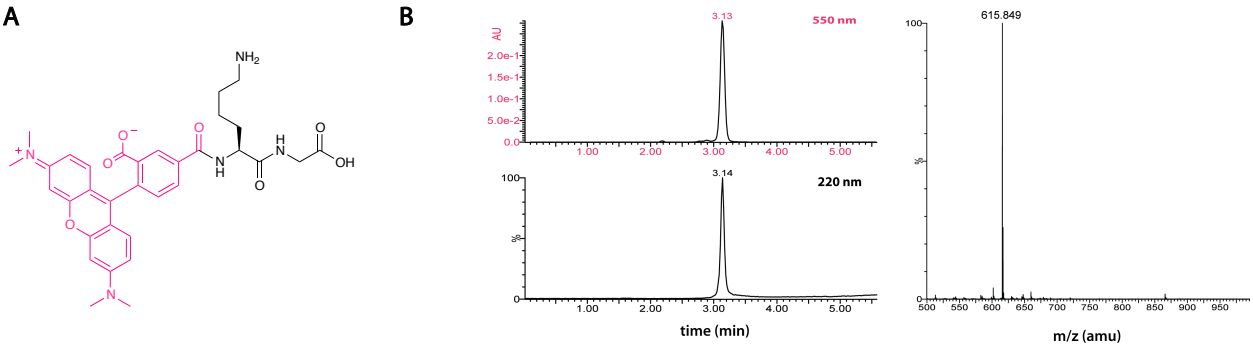

Figure 1. UbiQ-023. B: LC-MS analysis. Mobile phase A= 1% CH_3CN, 0.1% formic acid in water (milliQ) and B= 1% water (milliQ) and 0.1% formic acid in CH_3CN. XBridge BEH300 C18 5µm 4.6x100mm; column T= 40°C, flow= 0.8 mL/min. Gradient: 30–95%B over 3.5 min.

important: sample preparation

- dissolve the powder in DMSO to a final concentration of for example 1000 µM (25 ug in 40.5 uL DMSO)
- add this DMSO stock to the required buffer to a final concentration of 100 nM (DMSO concentration is now 0.01 vol%)
- one can also prepare a stock in milliQ of 100 uM by diluting the DMSO stock 10× in milliQ (DMSO conc is now 10 vol%)
- typical concentrations for assays: 25–100 nM. See reference 4 for full experimental details

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

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