

5-TAMRA-Lys-Gly-OH

UbiQ code : UbiQ-023

Batch # : B01112014-001

Amount : 25 ug, lyophilized powder

Mol. Weight : 615.7 Da

Storage : powder at -20°C , solution at -80°C . Protect from light. Please avoid multiple freeze/thaw cycles.

Productsheet

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

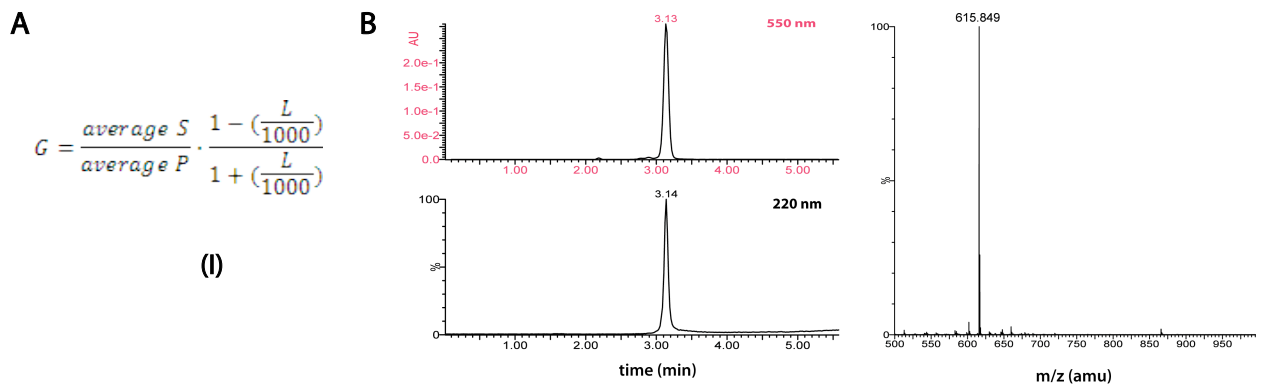


Figure 1 - A: Grating factor formula (I). B: LC-MS analysis. Mobile phase A = 1% CH_3CN , 0.1% formic acid in water (milliQ) and B = 1% water (milliQ) and 0.1% formic acid in CH_3CN . XBridge BEH300 C18 $5\mu\text{m}$ $4.6 \times 100\text{mm}$; column T = 40°C , flow = 0.8 mL/min. Gradient: 30–95% over 3.5 min. B:

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 (final DMSO concentration is now 0.01 vol%).
- one can also prepare a stock in milliQ of 100 μM by diluting the DMSO stock 10 \times in milliQ; the 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. *Anal. Biochem.* **2005**, 343, 244. (2) Huang et al. *Methods in Molecular Biology* **2009**, 565, 127. (3) Levine et al. *Anal. Biochem.* **1997**, 247, 83. (4) Geurink et al. *ChemBioChem*, **2012**, 13, 293.