

Ub-PTEN(5-21)-FP (human sequence, synthetic)

UbiQ code : UbiQ-030
 Batch # : B10102013-001
 Amount : 25 ug, lyophilized powder
 Purity : ≥95% by RP-HPLC
 Mol. Weight : 11.1 kDa
 Storage : upon arrival, powder at -20°C; solution at -80°C. Store dark and avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-030 is a fluorescence polarization HTS reagent based on amino acid sequence 5 – 21 of PTEN, a tumor suppressor phosphatase which is monoubiquitinated on Lys13 and Lys289. Monoubiquitination of these sites is important for regulation of PTEN mediated tumor suppression and its nuclear import. The peptide is modified on the N-terminus with 5-carboxytetramethylrhodamine (5-TAMRA) and conjugated at Lys13 to Ub via a native isopeptide bond.

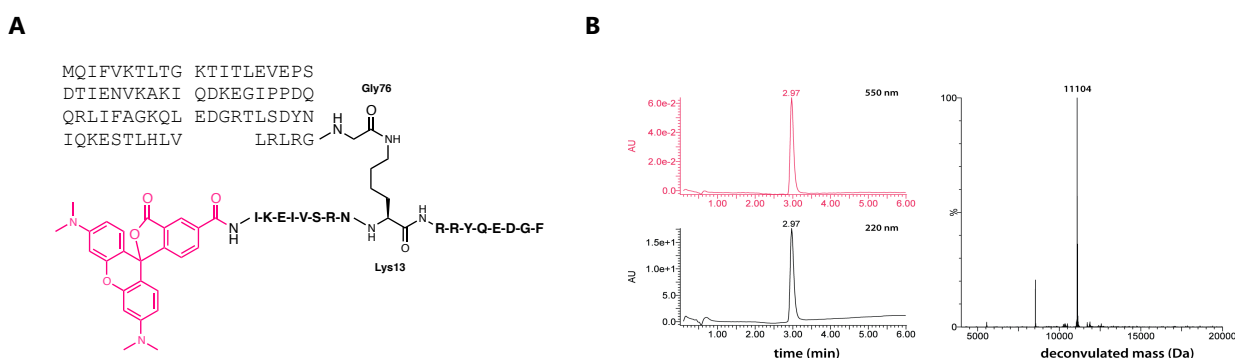


Figure 1. A: sequence UbiQ-030. B: LC-MS analysis. Mobile phase A= 1% CH₃CN, 0.1% formic acid in water (milliQ) and B= 1% water (milliQ) and 0.1% formic acid in CH₃CN. Phenomenex Kinetex C18, (2.1×50 mm), 2.6 μM; flow rate= 0.5 mL/min, column T = 40°C. Gradient: 5-95%B over 3.5 min.

important: sample preparation

- dissolve the powder in DMSO (e.g., 1.1 mg/mL = 100 uM)
- 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)
- final assay stocks of 100 nM will contain 0.1 vol% DMSO when prepared from a 100 uM DMSO stock, for example.
- for assays requiring higher substrate concentrations, prepare a more concentrated DMSO stock (e.g., 10 - 25 mg/mL).
- full exp. details can be found in open-access reference 4: Geurink et al. *ChemBiochem*, **2012**, 13, 293.

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