

UbiQ

targeting the ubiquitin system

K119 Ub-H2AX(115-143)-FP (human sequence, synthetic)

UbiQ code : UbiQ-038

Batch # : B09082012-001

Amount : 25 ug, lyophilized powder

Purity : $\geq 95\%$ by RP-HPLC

Mol. Weight : 11.9 kDa

Storage : upon arrival, powder at -20°C ; solution at -80°C . Store dark and avoid multiple freeze/thaw cycles.

Productsheet

Background. UbiQ-038 is a fluorescence polarization HTS reagent based on the peptide sequence 115 – 143 of the histone protein H2A-X. The peptide is modified on the N-terminus with a 5-carboxytetramethylrhodamine and conjugated at Lys119 to Ub via a native isopeptide bond.

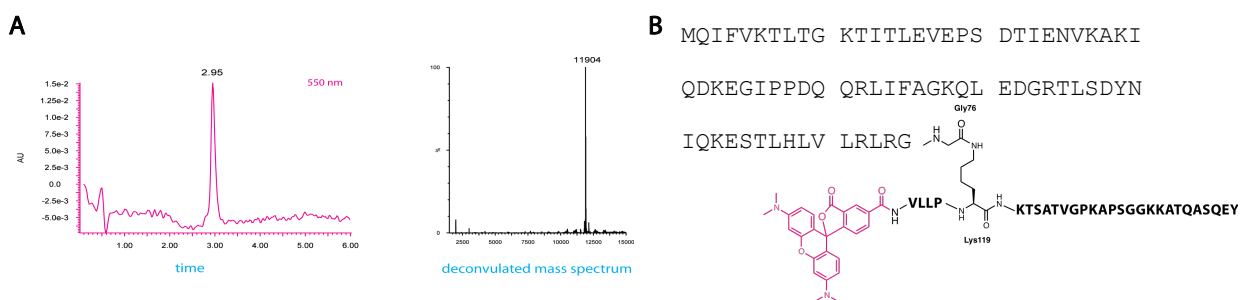


Figure 1. A: LC-MS analysis. Mobile phase A= 1% CH_3CN , 0.1% formic acid in water (milliQ) and B= 1% water (milliQ) and 0.1% formic acid in CH_3CN . Phenomenex Kinetex C18, (2.1 \times 50 mm, 2.6 μm); flow rate= 0.5 mL/min, column T= 40°C . Gradient: 5-95%B over 3.5 min. B: sequence UbiQ-038.

important: sample preparation

- prepare (for example) a 2 mM DMSO stock (24 mg/mL)
- add the DMSO stock to milliQ, e.g. a 2 mM DMSO stock diluted 20 \times in milliQ affords a 100 μM stock which can be aliquoted and stored.
- for assays this 100 μM stock can be diluted for example 1000 \times in buffer affording a final assay solution of 100 nM. The DMSO concentration during the assay is now 0.01 vol%.
- for full experimental details please see reference 5.

Literature. (1) Tirat et al. *Anal. Biochem.* **2005**, *343*, 244. (2) Huang et al. *Methods in Mol Biol* **2009**, *565*, 127. (3) Levine et al. *Anal. Biochem.* **1997**, *247*, 83. (4) Faesen et al. *Chem. Biol.* **2011**, *18*, 1550. (5) Geurink et al. *ChemBioChem* **2012**, *13*, 293. (6) Sheng et al. *Nat. Struct. Mol. Biol.* **2006**, *13*, 285.