

UbiQ

targeting the ubiquitin system

Biotin-Ahx-Ub pSer57 (human sequence, synthetic)

UbiQ code : UbiQ-113
Batch # : B01042015-001
Amount : 50 ug, lyophilized powder
Purity : $\geq 95\%$
Mol. Weight : 8.65 kDa
Storage : upon arrival, powder at -20°C ; buffered solution at -80°C . Please avoid multiple freeze/thaw cycles.

Productsheet

Background. Ub pSer57 (UbiQ-113) is a ubiquitin protein that is phosphorylated on Ser57. Phosphoproteomic studies have identified several phosphorylated sites in ubiquitin, among them Ser57. UbiQ-113 is made by total chemical synthesis and is therefore well-defined in terms of biotin and phosphoserine site (S^{P}) and incorporation efficiency (100%).

A

MQIFVKTLTGKTTITLEVEPSDTIENVKAKIQDKEGIPPDQORLI FAGKQLEDGRTL S^{P} DYNIQKESTLHLVLRRLGG

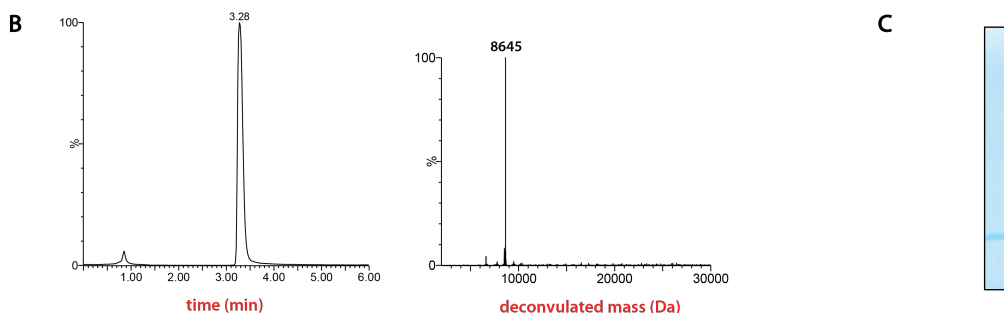


Figure 1. Sequence (A) and LC-MS analysis (B). Mobile phase A= 1% CH_3CN , 0.1% formic acid in water and B= 1% water and 0.1% formic acid in CH_3CN . XBridge BEH300 C18 $5\mu\text{m}$ $4.6\times 100\text{mm}$; column T = 40°C , flow= 0.8 mL/min. Gradient: 30–95% over 3.5 min. C: SDS-PAGE analysis. 12% Bolt Bis-Tris Plus gel (Life technologies) and MES running buffer. CBB staining with Coomassie G-250.

important: sample preparation

- dissolve the powder in as little DMSO as possible (20 - 40 mg/mL)
- add the DMSO stock to milliQ (please note the order of addition) and mix
- buffer the aq. solution as desired

Literature. (1) Kane *et al.* *J Cell Biol* **2014**, *205*, 143. (2) Kazlauskaitė *et al.* *Biochem J* **2014**, *460*, 127. (3) Kondapalli *et al.* *Open Biol* **2012**, *2*, 120080. (4) Koyano *et al.* *Nature* **2014**, *510*, 162. (5) V. Sauve and K. Gehring *Cell Res* **2014**, *24*, 1025. (6) Spratt *et al.* *Nat Commun* **2013**, *4*, 1983. (7) Trempe *et al.* *Science* **2013**, *340*, 1451. (8) T. Wauer and D. Komander *EMBO J* **2013**, *32*, 2099. (9) El Oualid *et al.* *Angew Chem Int Ed* **2010**, *49*, 10149.