

Ub pSer57 (human sequence, synthetic)

UbiQ code : UbiQ-113

Batch # : B01042015-001

Amount : 50 ug, lyophilized powder

Purity : $\geq 95\%$ by RP-HPLC and SDS-PAGE

Mol. Weight : 8.65 kDa

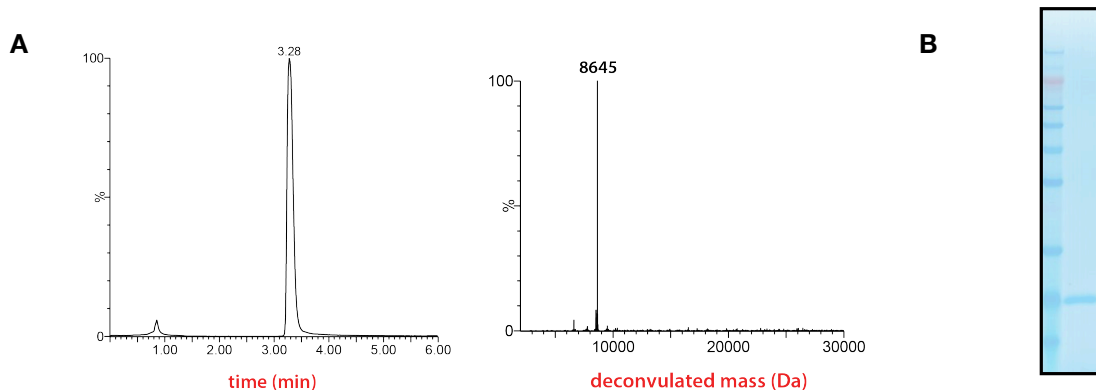
Storage : upon arrival powder at -20°C ; buffered solution at -80°C . Please avoid multiple freeze/thaw cycles.

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 Ser57.¹⁻⁵ It has been made by total chemical synthesis⁶ and is therefore well-defined in terms of pSer site and incorporation efficiency (100%).

Sequence

biotin-Ahx-MQIFVKLTGKTTITLEVPSDTIENVKAKIQDKEGIPPDQQLIFAGKQLEDGRTL^SPDYNIQKESTLHLVLRRLGG



A: LC-MS analysis. Mobile phase A= 1% CH_3CN , 0.1% formic acid in milliQ and B= 1% 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: SDS-PAGE analysis. 12% Bolt Bis-Tris Plus gel (Life technologies) and MES running buffer. CBB staining was performed with Coomassie G-250. Marker= SeeBlue Plus2 Pre-stained Standard (Invitrogen)

Important: sample preparation

- dissolve the powder in as little DMSO as possible (e.g. 40 mg/mL)
- add this DMSO stock slowly to milliQ (please note the order of addition)
- buffer the aq. solution as desired (final stocks of e.g. 0.5 mg/mL will contain 1.25 vol% DMSO)
- buffer exchange using 3 kDa spin filters or dialysis membrane allows total removal of DMSO if desired.



Literature.

- 1) Bennetzen et al. *Mol Cell Proteomics* **2010**, *9*, 1314.
- 2) Bian et al. *J Proteomics* **2014**, *96*, 253.
- 3) Kettenbach et al. *Sci Signal*, **2011**, *4*, rs5.
- 4) Sharma et al. *Cell Rep* **2014**, *8*, 1583.
- 5) Zhou et al. *J Proteome Res* **2013**, *12*, 260.
- 6) El Oualid et al. *Angew Chem Int Ed* **2010**, *49*, 10149.