

PicoSure™ Test Standard for Nanospray LC-MS

Part Number: PS-STND-1

Part Description: PicoSure Test Standard, 7-Equimolar mixture of synthetic peptides, 100 pmol

Product Description

Each vial contains an equimolar mixture of seven synthetic peptides with a total of 100 pmols of each peptide. The synthetic peptides are highly pure (> 95%) and ensure a long shelf life.

Preparation Instructions

Dilute to 200 µL for a 500 fmol/µl solution using acidified water (e.g. 0.1% formic acid in water) and vortex rigorously for 60 seconds.

Storage/Stability

Store lyophilized standard at -20°C (shelf life > 6 months) and reconstituted solutions at 4°C (shelf life ~1-week).

Vial Format

The lyophilized peptide standard mixture is in a standard 12 x 32 mm, polypropylene, conical, autosampler vial with 8-425 screw threads. The vial can hold a maximum volume of 850 µl with a usable volume of 675 µl and a residual volume of roughly 8 µl. For your convenience, 8-425 screw threaded caps (QTY = 2) with pre-slit septa, have been included. Once you are ready to dilute your sample, replace the shipping cap with the provided pre-slit septa cap.

Usage

The autosampler vial enables you to simply – dilute and shoot! There is no need to prepare a stock and transfer a dilute solution to a separate autosampler vial, saving you time and minimizing sample loss through surface binding.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Peptide	Sequence	Calculated MW (Da)	Calculated (M+H) ²⁺ m/z
1	LGGGPGGGDFR	988.4762	495.2436
2	LLGGPGGGDFR	987.5138	494.7642
3	DRVYIHPF	1045.5345	523.7745
4	pEHWSYGLRPG	1182.5570	592.2858
5	LLLGPGGDFR	986.5549	494.2847
6	LLLPLDFR	985.5961	493.8053
7	LLLPLDFR	1098.6801	550.3473

Table 1: Peptide sequences, masses and observed masses by nanoLC-MS

PicoChip Peptide Separation Technology

H354 ReproSil-Pur C18-AQ 3 μm 120 \AA

Experimental Conditions

System: Eksigent nanoLC-2D Ultra plus with Thermo LTQ
Column: PicoChip, 75 μm x 15 μm tip x 105 mm
Sample: PicoSure 7-peptide Equimolar Mixture, 100 pmol diluted to 500 fmol/ μl
Gradient: 2-50% B in 30 minutes
Mobile Phase: (A) 0.1% formic acid in water (B) 0.1% formic acid in acetonitrile
Injection: 1 μl direct injection
Flow Rate: 500 nL/min.

Base peak chromatogram of 500 fmol PicoSure Lot #SP1059 on PicoChip

