

Certificate of Analysis

www.tocris.com

Product Name: PDZ1 Domain inhibitor peptide

Catalog No.: 2207

Batch No.: 1

CAS Number: 1315378-73-4

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₃₈ H ₆₁ N ₉ O ₁₁
Batch Molecular Weight:	819.95
Physical Appearance:	White lyophilised solid
Net Peptide Content:	70%
Solubility:	Soluble to 1 mg/ml in 5% acetonitrile / water Soluble to 4 mg/ml in DMSO
Storage:	Desiccate at -20°C
Peptide Sequence:	Tyr-Lys-cyclo-(-Lys-Thr-Glu-β-Ala-)-Val

2. ANALYTICAL DATA

HPLC:	Shows >95% purity
Mass Spectrum:	Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: PDZ1 Domain inhibitor peptide

Catalog No.: 2207

Batch No.: 1

CAS Number: 1315378-73-4

Description:

Novel cyclic peptide that disrupts interaction between GluK2 (formerly GluR6) and the postsynaptic density protein 95 (PSD-95). Competes with the C-terminus of GluK2 for binding to the PDZ1 domain of PSD-95. Inhibits clustering of kainate receptors. Please refer to IUPHAR Guide to Pharmacology for the most recent naming conventions.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₈H₆₁N₉O₁₁

Batch Molecular Weight: 819.95

Physical Appearance: White lyophilised solid

Peptide Sequence:

Tyr-Lys-cyclo-(-Lys-Thr-Glu-β-Ala-)-Val

Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in 5% acetonitrile / water

Soluble to 4 mg/ml in DMSO

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Net Peptide Content: 70% (Remaining weight made up of counterions and residual water).

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such as Cys, Met, Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 µm filter to remove potential bacterial contamination whenever possible.

References:

Piserchio *et al* (2004) Targeting specific PDZ domains of PSD-95: structural basis for enhanced affinity and enzymatic stability of a cyclic peptide. *Chem.Biol.* **11** 469. PMID: 15123241.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956