

Certificate of Analysis

www.tocris.com

Product Name: L803-mts
CAS Number: 1043881-55-5

Catalog No.: 2256 **Batch No.:** 1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆₆H₁₁₀N₁₅O₂₀P
Batch Molecular Weight: 1464.64
Physical Appearance: White lyophilised solid
Net Peptide Content: 92%
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in 20% acetonitrile / water
Storage: Store at -20°C
Peptide Sequence: Myr-Gly-Lys-Glu-Ala-Pro-Pro-Ala-Pro-Pro-Gln-pSer-Pro-NH₂

2. ANALYTICAL DATA

HPLC: Shows 96% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical			Actual		
Ala	2.00	1.92	Lys	1.00	1.00
Arg			Met		
Asx			Phe		
Cys			Pro	5.00	5.10
Glx	2.00	1.98	Ser		
Gly	1.00	1.11	Thr		
His			Trp		
Ile			Tyr		
Leu			Val		

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: L803-mts

Catalog No.: 2256

Batch No.: 1

CAS Number: 1043881-55-5

Description:

Selective peptide inhibitor of glycogen synthase kinase-3 (GSK-3). Produces antidepressive behavior in mice when administered in vivo. Shows no inhibition of PKC, PKB or cdc2 protein kinase. Exhibits insulin mimetic activity. Activates glycogen synthase activity 2.5-fold in HEK293 cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₆₆H₁₁₀N₁₅O₂₀P

Batch Molecular Weight: 1464.64

Physical Appearance: White lyophilised solid

Peptide Sequence:

Myr-Gly-Lys-Glu-Ala-Pro-Pro-Ala-Pro-Pro-
Gln-pSer-Pro-NH₂

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in 20% acetonitrile / water

Net Peptide Content: 92% (Remaining weight made up of counterions and residual water).

Counter Ion: TFA

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.

Licensing Information:

Sold under licence from Tel Aviv University Future Technology LP.

References:

Chen *et al* (2004) Glycogen synthase kinase 3β (GSK3β) mediates 6-hydroxydopamine-induced neuronal death. *FASEB J.* **18** 1162. PMID: 15132987.

Kaidanovich-Beilin *et al* (2004) Rapid antidepressive-like activity of specific glycogen synthase kinase-3 inhibitor and its effects on β-catenin in mouse hippocampus. *Biol. Psychiatry* **55** 781. PMID: 15050857.

Plotkin *et al* (2003) Insulin mimetic action of synthetic phosphorylated peptide inhibitors of glycogen synthase kinase-3. *J. Pharm. Exp. Ther.* **305** 974.

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