

## Certificate of Analysis

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**Product Name:** L803  
**CAS Number:** 348089-28-1

**Catalog No.:** 2235      **Batch No.:** 1

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>50</sub>H<sub>80</sub>N<sub>13</sub>O<sub>19</sub>P  
**Batch Molecular Weight:** 1198.23  
**Physical Appearance:** White lyophilised solid  
**Net Peptide Content:** 74%  
**Counter Ion:** TFA  
**Solubility:** Soluble to 1 mg/ml in water  
**Storage:** Desiccate at -20°C  
**Peptide Sequence:** Lys-Glu-Ala-Pro-Pro-Ala-Pro-Pro-Gln-pSer-Pro

### 2. ANALYTICAL DATA

**HPLC:** Shows >99% purity  
**Mass Spectrum:** Consistent with structure

### 3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala	2.00	2.00	Lys	1.00	0.88
Arg			Met		
Asx			Phe		
Cys			Pro	5.00	4.87
Glx	2.00	1.98	Ser	1.00	0.63
Gly			Thr		
His			Trp		
Ile			Tyr		
Leu			Val		

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

**Product Name:** L803  
CAS Number: 348089-28-1**Catalog No.:** 2235 **Batch No.:** 1**Description:**

Novel phosphopeptide derived from GSK-3 recognition motif that acts as a substrate-competitive inhibitor of GSK-3 $\beta$  ( $IC_{50}$  = 150  $\mu$ M). Displays minimal inhibition of Cdc2, MAPK, PKA, CK2, PKC $\delta$  and PKB at 200  $\mu$ M. Myristoylated version available (L803-mts, Cat. No. 2256).

**Physical and Chemical Properties:**Batch Molecular Formula: C<sub>50</sub>H<sub>80</sub>N<sub>13</sub>O<sub>19</sub>P

Batch Molecular Weight: 1198.23

Physical Appearance: White lyophilised solid

**Peptide Sequence:****Lys-Glu-Ala-Pro-Pro-Ala-Pro-Pro-Gln-  
pSer-Pro****Storage:** Desiccate at -20°C**Solubility & Usage Info:**

Soluble to 1 mg/ml in water

**Net Peptide Content:** 74% (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  $\mu$ m filter to remove potential bacterial contamination whenever possible.

**References:**

**Plotkin et al** (2003) Insulin mimetic action of synthetic phosphorylated peptide inhibitors of glycogen synthase kinase-3. *J.Pharmacol.Exp.Ther.* **305** 974. PMID: 12626660.

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