

**Product Name:** 2B-(SP)  
**CAS Number:** 186901-17-7

**Catalog No.:** 1802      **Batch No.:** 1

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:**  $C_{71}H_{123}N_{26}O_{29}P$   
**Batch Molecular Weight:** 1835.88  
**Physical Appearance:** White lyophilised solid  
**Net Peptide Content:** 86%  
**Solubility:** Soluble to 1 mg/ml in water  
**Storage:** Desiccate at -20°C  
**Peptide Sequence:** Arg-Arg-Ala-Ala-Glu-Glu-Leu-Asp-Ser-Arg-  
Ala-Gly-pSer-Pro-Gln-Leu

**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

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CAS Number: 186901-17-7

**Catalog No.:** 1802 **Batch No.:** 1

**Description:**

Selective phosphopeptide substrate for glycogen synthase kinase-3 (GSK-3); derived from the phosphorylation site of the translation factor eIF2B.

**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>71</sub>H<sub>123</sub>N<sub>26</sub>O<sub>29</sub>P  
Batch Molecular Weight: 1835.88  
Physical Appearance: White lyophilised solid

**Peptide Sequence:**

Arg-Arg-Ala-Ala-Glu-Glu-Leu-Asp-Ser-Arg-  
Ala-Gly-pSer-Pro-Gln-Leu

**Storage:** Desiccate at -20°C

**Solubility & Usage Info:**

Soluble to 1 mg/ml in water  
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:** 86% (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 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:**

**Welsh** *et al* (1997) Peptide substrates suitable for assaying glycogen synthase kinase-3 in crude cell extracts. *Anal.Biochem.* **244** 16. PMID: 9025901.

**Williams** *et al* (1999) Phosphorylated seryl and threonyl, but not tyrosyl, residues are efficient specificity determinants for GSK-3β and Shaggy. *FEBS Lett.* **448** 86. PMID: 10217415.

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