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TOCRIS

Print Date: May 30th 2023

Certificate of Analysis

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Product Name: **SLIGRL-NH_2** **Catalog No.: 1468** **Batch No.: 15**

CAS Number: 171436-38-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	$C_{29}H_{56}N_{10}O_7$
Batch Molecular Weight:	656.82
Physical Appearance:	White lyophilised solid
Counter Ion:	TFA
Solubility:	Soluble to 1 mg/ml in water
Storage:	Store at -20°C
Peptide Sequence:	Ser-Leu-Ile-Gly-Arg-Leu-NH_2

2. ANALYTICAL DATA

HPLC:	Shows 98.2% purity
Mass Spectrum:	Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys		
Arg	1.00	1.04	Met		
Asx			Phe		
Cys			Pro		
Glx			Ser	1.00	0.72
Gly	1.00	0.93	Thr		
His			Trp		
Ile	1.00	1.01	Tyr		
Leu	2.00	2.02	Val		

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Product Name: **SLIGRL-NH_2** **Catalog No.: 1468** **15**

CAS Number: 171436-38-7

Description:

SLIGRL-NH_2 is an agonist peptide derived from the N-terminus of protease-activated receptor-2 (PAR_2). Activates PAR_2 (EC_{50} ~ 5 µM) and facilitates gastrointestinal transit in mice in vivo. Control Peptide also available.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{29}H_{56}N_{10}O_7$

Batch Molecular Weight: 656.82

Physical Appearance: White lyophilised solid

Peptide Sequence:

Ser-Leu-Ile-Gly-Arg-Leu-NH_2

Storage: Store 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.

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 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:

Kawabata *et al* (2001) In vivo evidence that protease-activated receptors 1 and 2 modulate gastrointestinal transit in the mouse. Br.J.Pharmacol. ***133*** 1213. PMID: 11498505.

Al-Ani *et al* (1995) Detection of functional receptors for the proteinase-activated-receptor-2-activating polypeptide, SLIGRL-NH_2, in rat vascular and gastric smooth muscle. Can.J.Physiol.Pharmacol. ***73*** 1203. PMID: 8564891.

Nystedt *et al* (1994) Molecular cloning of a potential proteinase activated receptor. Proc.Natl.Acad.Sci.U.S.A. ***91*** 9208. PMID: 7937743.