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TOCRIS

Print Date: Mar 15th 2024

Certificate of Analysis

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Product Name: **VKGILS-NH_2** **Catalog No.: 3392** **Batch No.: 12**

CAS Number: 942413-05-0

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{28}H_{54}N_8O_7$

Batch Molecular Weight: 614.79

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 2 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: Val-Lys-Gly-Ile-Leu-Ser-NH_2

2. ANALYTICAL DATA

HPLC: Shows 99.5 % purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys	1.00	0.98
Arg			Met		
Asx			Phe		
Cys			Pro		
Glx			Ser	1.00	1.00
Gly	1.00	1.01	Thr		
His			Trp		
Ile	1.00	1.01	Tyr		
Leu	1.00	1.02	Val	1.00	0.99

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Product Name: **VKGILS-NH_2** **Catalog No.: 3392** **12**

CAS Number: 942413-05-0

Description:

VKGILS-NH_2 is a reversed amino acid sequence control peptide for SLIGKV-NH_2, a protease-activated receptor 2 (PAR_2) agonist. Active Analog also available.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{28}H_{54}N_8O_7$

Batch Molecular Weight: 614.79

Physical Appearance: White lyophilised solid

Peptide Sequence:

Val-Lys-Gly-Ile-Leu-Ser-NH_2

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 2 mg/ml in 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 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:

Lin *et al* (2008) Protease-activated receptor-2 (PAR-2) is a weak enhancer of mucin secretion by human bronchial epithelial cells in vitro. Int.J.Biochem.Cell Biol. ***40*** 1379. PMID: 18077203.

Huang (2007) Protease-activated receptor-1 (PAR1) and PAR2 but not PAR4 mediate relaxations in lower esophageal sphincter. Regul.Pept. ***142*** 37. PMID: 17335921.

Tognetto *et al* (2000) Evidence that PAR-1 and PAR-2 mediate prostanoid-dependent contraction in isolated guinea-pig gallbladder. Br.J.Pharmacol. ***131*** 689. PMID: 11030717.