

Certificate of Analysis

www.tocris.com

Product Name: AC 187
CAS Number: 151804-77-2

Catalog No.: 3419 **Batch No.:** 11

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₂₇H₂₀₅N₃₇O₄₀
Batch Molecular Weight: 2890.25
Physical Appearance: White lyophilised solid
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Store at -20°C
Peptide Sequence: Ac-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asn-Thr-Gly-Ser-Asn-Thr-Tyr-NH₂

2. ANALYTICAL DATA

HPLC: Shows 97.6% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala	0.00	Not Detected	Lys	2.00	1.99
Arg	1.00	1.00	Met	0.00	Not Detected
Asx	2.00	2.01	Phe	0.00	Not Detected
Cys	0.00	Not Detected	Pro	1.00	1.06
Glx	3.00	2.97	Ser	2.00	2.01
Gly	2.00	1.99	Thr	4.00	3.93
His	1.00	0.90	Trp	0.00	Not Detected
Ile	0.00	Not Detected	Tyr	2.00	2.06
Leu	4.00	3.99	Val	1.00	0.98

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: AC 187**Catalog No.:** 3419**Batch No.:** 11

CAS Number: 151804-77-2

Description:

AC 187 is an orally active, potent amylin receptor antagonist ($IC_{50} = 0.48$ nM) that displays 38-fold and 400-fold selectivity over calcitonin and CGRP receptors respectively. Blocks amyloid β -induced neurotoxicity by attenuating the activation of initiator and effector caspases in vitro. Increases glucagon secretion, accelerates gastric emptying, alters plasma glucose levels and increases food intake in vivo.

Physical and Chemical Properties:Batch Molecular Formula: $C_{127}H_{205}N_{37}O_{40}$

Batch Molecular Weight: 2890.25

Physical Appearance: White lyophilised solid

Peptide Sequence:

Ac-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-
His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asn-
Thr-Gly-Ser-Asn-Thr-Tyr-NH₂

Storage: Store at -20°C**Solubility & Usage Info:**

Soluble to 1 mg/ml in water

This product is supplied in lyophilized form. It may appear as a solid, gel or film and 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 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 μ m filter to remove potential bacterial contamination whenever possible.

References:

Gedulin *et al* (2006) Role of endogenous amylin in glucagon secretion and gastric emptying in rats demonstrated with the selective antagonist, AC187. *Regul. Pept.* **137** 121. PMID: 16914214.

Jhamandas and MacTavish (2004) Antagonist of the amylin receptor blocks β -amyloid toxicity in rat cholinergic basal forebrain neurons. *J. Neurosci.* **24** 5579. PMID: 15201330.

Reidelberger *et al* (2004) Amylin receptor blockade stimulates food intake in rats. *Am. J. Physiol. Inter. Comp. Physiol.* **287** R568. PMID: 15130879.

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