

Certificate of Analysis

www.tocris.com

Product Name: Glucagon (Human, Porcine)

Catalog No.: 6927

Batch No.: 2

CAS Number: 16941-32-5

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₅₃ H ₂₂₅ N ₄₃ O ₄₉ S
Batch Molecular Weight:	3482.78
Physical Appearance:	White lyophilised solid
Net Peptide Content:	85%
Counter Ion:	TFA
Solubility:	Soluble to 1 mg/ml in water
Storage:	Store at -20°C
Peptide Sequence:	His-Ser-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Tyr- Ser-Lys-Tyr-Leu-Asp-Ser-Arg-Arg-Ala-Gln- Asp-Phe-Val-Gln-Trp-Leu-Met-Asn-Thr

2. ANALYTICAL DATA

HPLC:	Shows 95.3% purity
Mass Spectrum:	Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical Actual			Amino Acid Theoretical Actual		
Ala	1.00	0.98	Lys	1.00	1.00
Arg	2.00	2.03	Met	1.00	1.00
Asx	4.00	3.99	Phe	2.00	2.01
Cys			Pro		
Glx	3.00	3.00	Ser	4.00	2.91
Gly	1.00	1.00	Thr	3.00	2.60
His	1.00	1.02	Trp	1.00	0.18
Ile			Tyr	2.00	1.87
Leu	2.00	2.01	Val	1.00	0.97

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: Glucagon (Human, Porcine)

Catalog No.: 6927

Batch No.: 2

CAS Number: 16941-32-5

Description:

Endogenous glucagon receptor agonist; regulates blood glucose.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅₃H₂₂₅N₄₃O₄₉S

Batch Molecular Weight: 3482.78

Physical Appearance: White lyophilised solid

Peptide Sequence:

His-Ser-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-
Ser-Lys-Tyr-Leu-Asp-Ser-Arg-Arg-Ala-Gln-
Asp-Phe-Val-Gln-Trp-Leu-Met-Asn-Thr

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.

Net Peptide Content: 85% (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 µm filter to remove potential bacterial contamination whenever possible.

References:

Zhou et al (2017) A novel glucagon-like peptide-1/glucagon receptor dual agonist exhibits weight-lowering and diabetes-protective effects. *Eur.J.Med.Chem.* **138** 1158. PMID: 28772236.

Mayo et al (2003) International Union of Pharmacology. XXXV. The glucagon receptor family. *Pharmacol Rev.* **55** 167. PMID: 12615957.

Thomsen et al (1972) The amino acid sequence of human glucagon. *FEBS Lett.* **21** 315. PMID: 11946536 .

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