

# **Certificate of Analysis**

Print Date: Apr 4th 2024

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**Product Name: GIP (1-39)** Catalog No.: 2257 Batch No.: 13

CAS Number: 725474-97-5

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{210}H_{316}N_{56}O_{61}S$ 

**Batch Molecular Weight:** 4633.21

**Physical Appearance:** White lyophilised solid

**TFA** Counter Ion:

Solubility: Soluble to 10 mg/ml in water

Store at -20°C Storage:

Tyr-Ala-Glu-Gly-Thr-Phe-IIe-Ser-Asp-Tyr-**Peptide Sequence:** 

> Ser-IIe-Ala-Met-Asp-Lys-IIe-Arg-Gln-Gln-Asp-Phe-Val-Asn-Trp-Leu-Leu-Ala-Gln-Lys-Gly-Lys-Lys-Ser-Asp-Trp-Lys-His-Asn

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	3.00	2.95	Lys	5.00	4.96
Arg	1.00	1.08	Met	1.00	0.99
Asx	6.00	5.78	Phe	2.00	1.97
Cys			Pro		
Glx	4.00	3.95	Ser	3.00	3.05
Gly	2.00	2.02	Thr	1.00	1.05
His	1.00	1.06	Trp	2.00	Detected
lle	3.00	2.91	Tyr	2.00	1.99
Leu	2.00	2.05	Val	1.00	1.05

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Tel: +44 (0)1235 529449 www.tocris.com/distributors Tel:+1 612 379 2956



# **Product Information**

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Product Name: GIP (1-39) Catalog No.: 2257 13

CAS Number: 725474-97-5

#### **Description:**

GIP (1-39) is an endogenous truncated form of the incretin hormone GIP. More potent at stimulating glucose-dependent insulin secretion from rat pancreatic  $\beta$ -cells than GIP (Cat. No 2084).

#### **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{210}H_{316}N_{56}O_{61}S$ 

Batch Molecular Weight: 4633.21

Physical Appearance: White lyophilised solid

## Peptide Sequence:

Tyr-Ala-Glu-Gly-Thr-Phe-IIe-Ser-Asp-Tyr-Ser-IIe-Ala-Met-Asp-Lys-IIe-Arg-Gln-Gln-Asp-Phe-Val-Asn-Trp-Leu-Leu-Ala-Gln-Lys-Gly-Lys-Lys-Ser-Asp-Trp-Lys-His-Asn Storage: Store at -20°C

#### Solubility & Usage Info:

Soluble to 10 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 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:

Xie et al (2004) GIP1-39, a novel Insotropic peptide form and aspects on its mechanism of action. Regul.Peptides 121 107.

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