

# TOCRIS a biotechne brand

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Print Date: Jan 15th 2016

Product Name: Tabimorelin hemifumarate Catalog No.: 2308 Batch No.: 1

**Certificate of Analysis** 

CAS Number: 242143-80-2

IUPAC Name: N-[(2E)-5-Amino-5-methyl-1-oxo-2-hexenyl]-N-methyl-3-(2-naphthalenyl)-D-alanyl-N,Nα-dimethyl-D-

phenylalaninamide hemifumarate

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{32}H_{40}N_4O_3.\frac{1}{2}C_4H_4O_4.\frac{1}{2}H_2O_4$ 

**Batch Molecular Weight:** 595.73 **Physical Appearance:** White solid

**Solubility:** water to 10 mM with gentle warming

DMSO to 100 mM

Storage: Desiccate at RT

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

HPLC: Shows >98.2% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 68.55 7.27 9.4 Found 68.38 7.15 9.3



# **Product Information**

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#### **Description:**

Potent, orally active ghrelin receptor (GHS-R1a) agonist ( $K_i = 50$  nM at human recombinant GHS-R1a). Stimulates GH release from rat pituitary cells with an EC<sub>50</sub> value of 2.7 nM. Induces hyperphagia and adiposity in lean rats, but not in leptin signaling-deficient ZDF rats.

# **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{32}H_{40}N_4O_3$ . ½ $C_4H_4O_4$ . ½ $H_2O$ 

Batch Molecular Weight: 595.73 Physical Appearance: White solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

## Storage: Desiccate at RT

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

# Solubility & Usage Info:

water to 10 mM with gentle warming DMSO to 100 mM

## 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).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

### References:

Hansen et al (1999) Pharmacological characterisation of a new oral GH secretagogue, NN703. Eur.J.Endocrinol. 141 180. PMID: 10427162.

**Holm** *et al* (2004) Adipogenic and orexigenic effects of the ghrelin-receptor ligand tabimorelin are diminished in leptin-signalling-deficient ZDF rats. Eur.J.Pharmacol. *150* 893.