# **Certificate of Analysis**

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Print Date: May 28th 2024

# Product Name: Phosphoramidon disodium salt

Catalog No.: 6333 Batch No.: 4

CAS Number: IUPAC Name:

TOCRIS

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164204-38-0  $N-[N-[[(6-Deoxy-\alpha-L-mannopyranosyl)oxy]hydroxyphosphinyl]-L-leucyl]-L-tryptophan disodium salt$ 

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight:

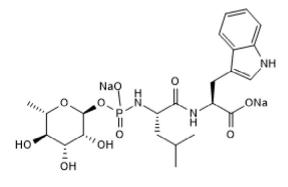
**Physical Appearance:** 

**Batch Molecular Structure:** 

Solubility:

Storage:

C<sub>23</sub>H<sub>32</sub>N<sub>3</sub>Na<sub>2</sub>O<sub>10</sub>P 587.47 White solid water to 100 mM Store at -20°C



## 2. ANALYTICAL DATA

HPLC: Mass Spectrum:

Shows 98.9% purity Consistent with structure

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

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CAS Number: 164204-38-0

IUPAC Name: N-[N-[[(6-Deoxy-α-L-mannopyranosyl)oxy]hydroxyphosphinyl]-L-leucyl]-L-tryptophan disodium salt

### Description:

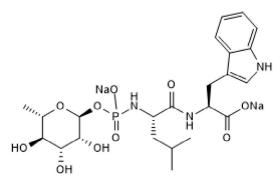
Phosphoramidon disodium salt is a neutral endopeptidase (neprilysin) inhibitor. Blocks degradation of amyloid  $\beta$  peptides and increases A $\beta$  levels in rodents. Also blocks endothelin converting enzyme (ECE).

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>23</sub>H<sub>32</sub>N<sub>3</sub>Na<sub>2</sub>O<sub>10</sub>P Batch Molecular Weight: 587.47 Physical Appearance: White solid

#### Minimum Purity: ≥95%

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



### Storage: Store at -20°C

#### Solubility & Usage Info:

## water to 100 mM

CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival. Solutions should be made up as soon as the vial is opened.

Catalog No.: 6333

#### 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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:**

**Marr and Hafez** (2014) Amyloid-beta and Alzheimer's disease: the role of neprilysin-2 in amyloid-beta clearance. Front.Aging Neurosci. *6* 187. PMID: 25165447.

**Shirotani** *et al* (2001) Neprilysin degrades both amyloid  $\beta$  peptides 1-40 and 1-42 most rapidly and efficiently among thiorphan- and phosphoramidon-sensitive endopeptidases. J.Biol.Chem. **276** 21895. PMID: 11278416.

**Warner** *et al* (1992) Regional differences in endothelin converting enzyme activity in rat brain: inhibition by phosphoramidon and EDTA. Br.J.Pharmacol. **106** 948. PMID: 1393292.

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