TOCRIS
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Print Date: Jan 15th 2016

Certificate of Analysis

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Product Name: **2,4-Dihydroxyphenylacetyl-L-asparagine** **Catalog No.: 0262** **Batch No.: 1**

CAS Number: 111872-98-1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{12}H_{14}N_2O_6$

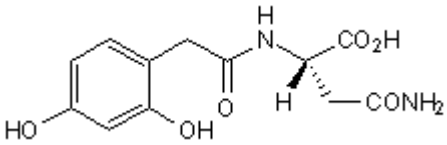
Batch Molecular Weight: 282.25

Physical Appearance: White solid

Solubility: water to 50 mM

Storage: Desiccate at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

Melting Point: Between 151 - 153°C(dec)

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D$ = +23.6 (Concentration = 1.18, Solvent = Methanol)

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	51.06	5	9.93
Found	51.17	5.36	9.6

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: 2,4-Dihydroxyphenylacetyl-L-asparagine **Catalog No.:** 0262 **Batch No.:** 1

CAS Number: 111872-98-1

Description:

Constituent of various spider toxins. Reported to be specific blocker of glutamate receptors.

Physical and Chemical Properties:

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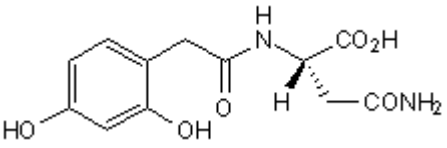

Storage: Desiccate at -20°C

Solubility & Usage Info:

water to 50 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:

Pan-Hou *et al* (1987) Inhibitory effect of 2,4-dihydroxyphenylacetylasparagine, a common moiety of spider toxin, on glutamate binding to rat brain synaptic membranes. Neurosci.Lett. ***81*** 199. PMID: 2827066.

Pan-Hou *et al* (1989) A spider toxin (JSTX) inhibits L-glutamate uptake by rat brain synaptosomes. Brain Res. ***476*** 354. PMID: 2564797.

Usherwood *et al* (1990) Mechanisms of neurotoxicity of low molecular weight spider toxins. Basic Science in Toxicology. Ed. G.N. Volans 569.