

Certificate of Analysis

Print Date: Aug 22nd 2022

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Product Name: Ibotenic acid Catalog No.: 0285 Batch No.: 37

CAS Number: 2552-55-8

IUPAC Name: α-Amino-(3-hydroxy-5-isoxazolyl)acetic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_5H_6N_2O_4.H_2O$ **Batch Molecular Formula:**

Batch Molecular Weight: 176.13

Physical Appearance: Off White solid Solubility: water to 10 mM

1.1eq. NaOH to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.4$ (Butanol/Acetic acid/Water 4:1:1)

HPLC: Shows 100% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 34.1 4.58 15.91 Found 34.16 15.82 4.6

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Product Information

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Product Name: Ibotenic acid Catalog No.: 0285 37

CAS Number: 2552-55-8

IUPAC Name: α -Amino-(3-hydroxy-5-isoxazolyl)acetic acid

Description:

Ibotenic acid is a NMDA and metabotropic glutamate receptor

agonist.

Physical and Chemical Properties:

Batch Molecular Formula: $C_5H_6N_2O_4.H_2O$

Batch Molecular Weight: 176.13 Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

water to 10 mM

1.1eq. NaOH to 100 mM

CAUTION - Solutions of this product should be made up and used on the same day. Solutions that are frozen should be aliquoted and used within 1 week.

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:

Pin and Duvoisin (1995) The metabotropic glutamate receptors: structure and functions. Neuropharmacology **34** 1. PMID: 7623957. **Nakanishi** (1992) Molecular diversity of glutamate receptors and implications for brain functions. Science **258** 597. PMID: 1329206. **Watkins and Evans** (1981) Excitatory amino acid transmitters. Annu.Rev.Pharmacol.Toxicol. **21** 165. PMID: 6112965.

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