



Certificate of Analysis

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Product Name: UPF 648 Catalog No.: 4926 Batch No.: 2

CAS Number: 213400-34-1

IUPAC Name: (1S,2S)-2-(3,4-Dichlorobenzoyl)cyclopropanecarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{11}H_8Cl_2O_3$ Batch Molecular Weight:259.09Physical Appearance:White solid

Storage: ethanol to 100 mM Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.5$ (Dichloromethane:Methanol [9:1])

HPLC: Shows 99.4% purity

1H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = +163.3$ (Concentration = 0.98, Solvent = Acetone)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 50.99 3.11 Found 51.14 3.05



Product Information

Print Date: Oct 10th 2018

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IUPAC Name: (1S,2S)-2-(3,4-Dichlorobenzoyl)cyclopropanecarboxylic acid

Description:

Potent kynurenine 3-monooxygenase (kynurenine 3-hydroxylase; KMO) inhibitor ($IC_{50} = 20$ nM). Increases kynurenic acid levels, and decreases 3-HK and QUIN levels in cerebrum and liver of neonatal rodents. Neuroprotective in a Drosophila model of Huntington's disease.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₁H₈Cl₂O₃ Batch Molecular Weight: 259.09 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

ethanol 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:

Amaral et al (2013) Structural basis of kynurenine 3-monooxygenase inhibition. Nature 496 382. PMID: 23575632.

Campesan *et al* (2011) The kynurenine pathway modulates neurodegeneration in a *Drosophila* model of Huntington's disease. Curr.Biol. **21** 961. PMID: 21636279.

Amori et al (2009) On the relationship between the two branches of the kynurenine pathway in the rat brain in vivo. J.Neurochem. 109 316. PMID: 19226371.

Ceresoli-Borroni *et al* (2007) Perinatal kynurenine 3-hydroxylase inhibition in rodents: pathophysiological implications. J.Neurosci.Res. *85* 845. PMID: 17279543.

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