

Certificate of Analysis

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Product Name: Kynurenic acid

Catalog No.: 0223

Batch No.: 61

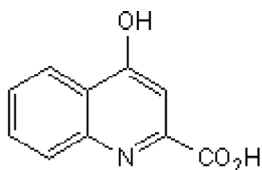
CAS Number: 492-27-3

EC Number: 207-751-5

IUPAC Name: 4-Hydroxyquinoline-2-carboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₀H₇NO₃·H₂O
Batch Molecular Weight: 207.19
Physical Appearance: Pale yellow solid
Solubility: DMSO to 50 mM
 1eq. NaOH to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.9% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	57.97	4.38	6.76
Found	57.87	4.35	6.66

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

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IUPAC Name: 4-Hydroxyquinoline-2-carboxylic acid

Description:

Kynurenic acid is a broad spectrum EAA antagonist. Putative GPR35 ligand. Kynurenic acid protects tissues in cardiac, cerebral, renal, and retinal ischemia models via activation of GPR35 and induction of ATP synthase dimerization in an ATPIF1-dependent and pertussis toxin (Cat. No. 3097) sensitive manner. Sodium Salt also available.

Physical and Chemical Properties:

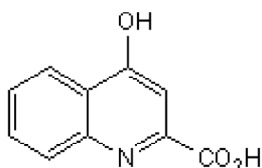
Batch Molecular Formula: C₁₀H₇NO₃.H₂O

Batch Molecular Weight: 207.19

Physical Appearance: Pale yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Wyant et al (2022) Mitochondrial remodeling and ischemic protection by G protein-coupled receptor 35 agonists. *Science* **377** 621. PMID: 35926043.

Wang et al (2006) Kynurenic acid as a ligand for orphan G protein-coupled receptor GPR35. *J.Biol.Chem.* **281** 22021. PMID: 16754668.

Pittaluga et al (1997) The 'kynurenate test,' a biochemical assay for putative cognition enhancers. *J.Pharmacol.Exp.Ther.* **283** 82. PMID: 9336311.

Storage: Store at RT

Solubility & Usage Info:

DMSO to 50 mM

1eq. NaOH 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. *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.

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