(-)-(α)-Kainic Acid (hydrate)
Item No. 78050

CAS Registry No.: 58002-62-3
Formal Name: 2S-carboxy-4S-(1-methylethenyl)-3S-pyrrolidenacetic acid, monohydrate
MF: C11H15NO4 • H2O
FW: 231.2
Purity: ≥98%
Stability: ≥2 years at room temperature
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that (-)-(α)-kainic acid (hydrate) be stored as supplied at 22°C. It will be stable for at least two years.

(-)-(α)-Kainic acid (hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolve the (-)-(α)-kainic acid (hydrate) in an organic solvent purged with an inert gas. (-)-(α)-Kainic acid (hydrate) is soluble in organic solvents such as DMSO. The solubility of (-)-(α)-kainic acid (hydrate) in this solvent is approximately 2 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of (-)-(α)-kainic acid (hydrate) can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of (-)-(α)-kainic acid (hydrate) in PBS (pH 7.2) is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Kainic acid is a natural marine product originally isolated from the red marine alga D. Simplex. It is a potent central nervous system stimulant, and has been developed as the prototype neuroexcitatory amino acid for the induction of seizures in experimental animals, at a typical dose of 10-30 mg/kg in mice.1 Kainic acid is neuroexcitotoxic and epileptogenic, acting through specific kainate receptors.2

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/78050

WARNING: This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to your institution.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereto. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

The limitations of liability do not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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