Phenylpiracetam

Item No. 13897

CAS Registry No.: 77472-70-9
Formal Name: 2-oxo-4-phenyl-1-pyrroldineacetamide
Synonyms: Carphedon, Phenotropil™
MF: C11H14N2O2
FW: 218.3
Purity: ≥98%
Stability: ≥1 year at -20°C

Laboratory Procedures

For long term storage, we suggest that phenylpiracetam be stored as supplied at -20°C. It should be stable for at least one year.

Phenylpiracetam is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the phenotropil under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of phenylpiracetam in these solvents is approximately 16, 14, and 20 mg/ml, respectively.

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. If an organic solvent-free solution of phenylpiracetam is needed, it can be prepared by evaporating the acetonitrile and directly dissolving the neat oil in aqueous buffers. The solubility of phenylpiracetam in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Phenylpiracetam is a nootropic derivative of the GABAergic agent piracetam and has been evaluated for its efficacy in reducing neurological deficits related to cerebral ischemia, epilepsy, and neurobehavioral disorders. At 10-100 mg/kg in mice, phenylpiracetam can increase locomotor and antidepressant activity in the open-field and forced swimming tests, as well as enhance memory in a passive avoidance response test. Because of its cognitive enhancing and general stimulant properties, phenylpiracetam has the potential to be abused recreationally and is listed as a banned substance by the World Anti-Doping Agency and the International Olympic Committee. This product is intended for research and forensic purposes only.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/13897

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 by email 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 hereof. 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. This limitation of liability does not apply in the case of intentional acts of negligence by 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.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.