

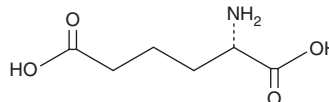
PRODUCT INFORMATION



L- α -Aminoadipic Acid

Item No. 17579

CAS Registry No.: 1118-90-7
Formal Name: 2S-amino-hexanedioic acid
Synonym: (S)-2-Aminohexanedioic Acid
MF: C₆H₁₁NO₄
FW: 161.2
Purity: \geq 95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

L- α -Aminoadipic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the L- α -aminoadipic acid in the solvent of choice, which should be purged with an inert gas. L- α -Aminoadipic acid is soluble in 1N HCl at a concentration of approximately 10 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 L- α -aminoadipic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of L- α -aminoadipic acid in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

L- α -Aminoadipic acid is a gliotoxic analog of the excitatory neurotransmitter glutamate that competitively inhibits glutamine synthetase with a K_i value of 209 μ M.^{1,2} It actively accumulates in glial cells and inhibits the glutamate transporter with a K_i value of 192 μ M.^{1,2}

References

1. Huck, S., Grass, F., and Hörtnagl, H. The glutamate analogue α -aminoadipic acid is taken up by astrocytes before exerting its gliotoxic effect *in vitro*. *J. Neurosci.* **4**(10), 2650-2657 (1984).
2. McBean, G.J. Inhibition of the glutamate transporter and glial enzymes in rat striatum by the gliotoxin, α -aminoadipate. *Br. J. Pharmacol.* **113**(2), 536-540 (1994).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/14/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM