

Product Data Sheet

Product Name: Lithium Citrate

Cat. No.: GC11127

Chemical Properties

Cas. No. 6080-58-6

Chemical Name trilithium;2-hydroxypropane-1,2,3-tricarboxylate;tetrahydrate

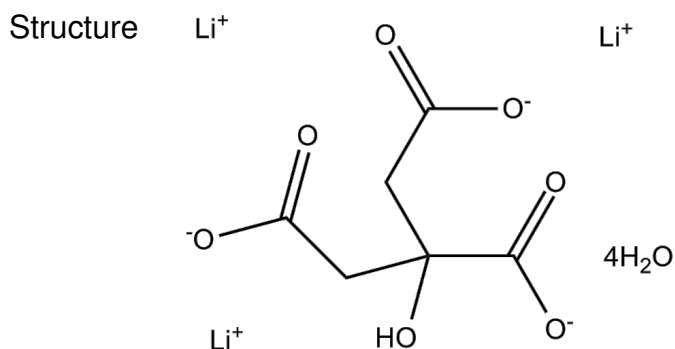
SMILES [Li+].[Li+].[Li+].C(C(=O)[O-])C(CC(=O)[O-])(C(=O)[O-])O.O.O.O.O

Formula $C_6H_5O_7 \cdot 4H_2O \cdot 3Li$ M.Wt 281.98

Solubility ≥ 14.1 mg/mL in DMSO with ultrasonic and warming Storage Store at 2-8°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.



Background

Lithium Citrate is the active component of Lithium which is a drug used in treatment of psychiatric disease [1].

Lithium Citrate has shown the effects on metabolic and signaling pathways in the brain based on the specific clinical condition and disease model [2]. Lithium Citrate has been reported to use as a mood stabilizer when treating bipolar mood disorders (BD) and reduce the risk of self-harm in BD patient. In addition, Lithium Citrate has been found to be the choice drug in treatment of acute manic episodes.

Caution: Product has not been fully validated for medical applications. For research use only.

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Moreover, Lithium Citrate has been revealed to dissolve uric acid crystals in urine obtained from patients with gout. Besides, Lithium Citrate has been exhibited to have some dose-dependent side-effects. The most of the side-effects of Lithium Citrate is the tendency to inhibit the prostatic acid phosphatase enzyme (PAP), which leading to the accumulation of PAP [1].

References:

- [1] Oruch R1, Elderbi MA2, Khattab HA3, Pryme IF4, Lund A5. Lithium: A review of pharmacology, clinical uses, and toxicity. Eur J Pharmacol. 2014 Jun 30. pii: S0014-2999(14)00493-2.
- [2] Janson CG1, Assadi M, Francis J, Bilaniuk L, Shera D, Leone P. Lithium citrate for Canavan disease. Pediatr Neurol. 2005 Oct; 33(4):235-43.

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