

[Open Peer Review on Qeios](#)

Lithium Citrate

National Cancer Institute

Source

National Cancer Institute. *Lithium Citrate*. NCI Thesaurus. Code C61812.

The citrate salt of lithium, a monovalent cation with antimanic activity. Although the exact mechanism is unclear, lithium might exert its mood-stabilizing effect via reduction of catecholamine concentration mediated through transneuronal membrane transport of sodium ion by sodium-potassium-stimulated adenosine triphosphatase (Na-K-ATPase). Alternatively, lithium may decrease cyclic adenosine monophosphate (cAMP) concentrations, which would desensitize hormonal-sensitive adenylyl cyclase receptors. Furthermore, lithium, in recommended dosage, blocks the activity of inositol-1-phosphatase, thereby resulting in the subsequent decrease of postsynaptic second messengers, diacylglycerol and inositol triphosphate, that contribute to chronic cell stimulation by altering electrical activity in the neuron.