



## Product Information

Product ID E0929

CAS No. 82854-37-3

Chemical Name

Synonym

Formula  $C_{35}H_{46}O_{20}$

Formula Wt. 786.73

Melting Point

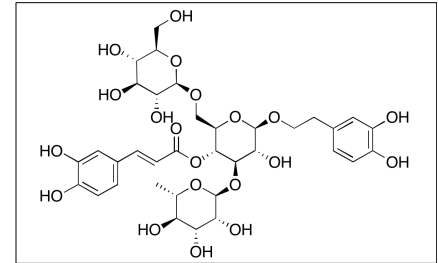
Purity  $\geq 98\%$

Solubility Soluble in water and ethanol.

Store Temp Ambient

Ship Temp Ambient

**Description** Echinacoside is a phenylethanoid glycoside found in *Echinacea*, among other sources; it exhibits neuroprotective and vasodilatory activities. In vivo, echinacoside inhibits cytochrome c release and caspase-3 activation through modulation of ERK signaling, resulting in neuroprotection in a model of middle cerebral artery occlusion. Echinacoside also displays neuroprotective benefit in a MPTP-induced mouse model of Parkinson's Disease, decreasing the Bax/Bcl-2 ratio and inhibiting suppression of dopamine and dopamine transporter (DAT) levels. This compound increases cGMP in rat aortic rings, inducing vasodilation. Additionally, echinacoside improves bone mineral density and microarchitecture, decreasing RANKL expression and increasing osteoprotegerin levels in animal models of osteopenia.



**Bulk quantities available upon request**

Product ID	Size
E0929	5 mg
E0929	10 mg
E0929	25 mg

**References** Yang X, Li F, Yang Y, et al. Efficacy and safety of echinacoside in a rat osteopenia model. *Evid Based Complement Alternat Med.* 2013;2013:926928. PMID: 23573159.

Zhu M, Lu C, Li W. Transient exposure to echinacoside is sufficient to activate Trk signaling and protect neuronal cells from rotenone. *J Neurochem.* 2013 Feb;124(4):571-80. PMID: 23189969.

Wei LL, Chen H, Jiang Y, et al. Effects of echinacoside on histio-central levels of active mass in middle cerebral artery occlusion rats. *Biomed Environ Sci.* 2012 Apr;25(2):238-44. PMID: 22998833.

Zhao Q, Gao J, Li W, et al. Neurotrophic and neurorescue effects of Echinacoside in the subacute MPTP mouse model of Parkinson's disease. *Brain Res.* 2010 Jul 30;1346:224-36. PMID: 20478277.

He WJ, Fang TH, Ma X, et al. Echinacoside elicits endothelium-dependent relaxation in rat aortic rings via an NO-cGMP pathway. *Planta Med.* 2009 Oct;75(13):1400-4. PMID: 19468974.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.