

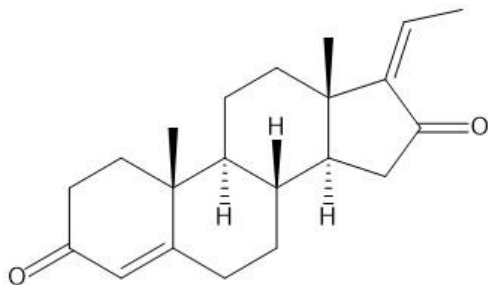
Catalog # 10-3816

Guggulsterone-(Z)

CAS# 39025-23-5

(Z)-Pregna-4,17(20)-diene-3,16-dione

Lot # X109375



A natural steroid from *Commiphora mukul* extract (guggulipid) which lowers cholesterol and acts as an FXR antagonist.¹ Attenuates astrocyte-mediated neuroinflammation.² Induces differentiation of pluripotent stem cells to dopaminergic neurons.³ Produces antidepressant-like effects via activation of the BDNF signaling pathway in mouse models.⁴

- 1) Urizar *et al.* (2002), *A Natural Product That Lowers Cholesterol as an Antagonist Ligand for FXR*; Science, **296** 1703
- 2) Liu *et al.* (2018), *Z-guggulsterone attenuates astrocytes-mediated neuroinflammation after ischemia by inhibiting toll-like receptor 4 pathway*; J. Neurochem., **147** 803
- 3) Agbay *et al.* (2018), *Guggulsterone-releasing Microspheres Direct the Differentiation of Human Induced Pluripotent Stem Cells Into Neural Phenotypes*; Biomed. Mater., **13** 034104
- 4) Liu *et al.* (2017), *Z-Guggulsterone Produces Antidepressant-Like Effects in Mice through Activation of the BDNF Signaling Pathway*; Int. J. Neuropsychopharmacol., **20** 485

PHYSICAL DATA

Molecular Weight:	312.45
Molecular Formula:	C ₂₁ H ₂₈ O ₂
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 6 mg/ml with warming) or in Ethanol (3 mg/ml with warming)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 3 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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