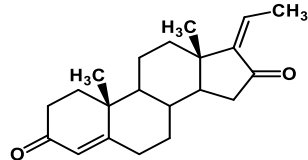


Guggulsterone-Z

Name of the Phytochemical	Guggulsterone-Z
Chemical Structure	
Botanical Source	Commiphora mukul
CAS Number	39025-23-5
Functional Activity	<ul style="list-style-type: none"> • Acts as an antagonist of the farnesoid X receptor in humans • Lowers cholesterol due to its function as an antagonist ligand for the bile acid receptor • Demonstrates antitumor-promoting effects inhibiting both constitutive and interleukin-6-induced STAT3 activation in human multiple myeloma cells and suppressing the VEGF-VEGF/R2-Akt signaling axis in DU145 human prostate cancer cells
Key References	<ol style="list-style-type: none"> 1. Z-guggulsterone negatively controls microglia-mediated neuroinflammation via blocking I kappa B- alpha -NF- kappa B signals. Neurosci Lett.2016, 619, 34-42 2. Z-Guggulsterone Improves the Scopolamine-Induced Memory Impairments Through Enhancement of the BDNF Signal in C57BL/6J Mice. Neurochem Res. 2016, 41, 3322-3332 3. Z-Guggulsterone Produces Antidepressant-Like Effects in Mice through Activation of the BDNF Signaling Pathway. Int J Neuropsychopharmacol. 2017, 20, 485-497 4. Z-Guggulsterone attenuates astrocytes-mediated neuroinflammation after ischemia by inhibiting toll-like receptor 4 pathways. J Neurochem. 2018, 147, 803-815 5. Bile acids promote gastric intestinal metaplasia by upregulating CDX2 and MUC2 expression via the FXR/NF- kappa B signalling pathway. Int J Oncol. 2019, 54, 879-892 6. Z-Guggulsterone attenuates glucocorticoid-induced osteoporosis through activation of Nrf2/HO-1 signaling. Life Sci. 2019, 224, 58-66

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