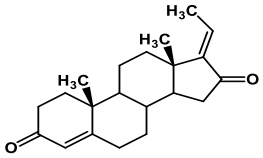
Guggulsterone-E

Name of the Phytochemical	**Guggulsterone-E**
Chemical Structure	
Botanical Source	Commiphora mukul
CAS Number	39025-24-6
Functional Activity	• Antihyperlipidemic. Induces the expression of human CYP3A • decreases chenodeoxycholic acid (CDCA)-induced FXR • Potently reverses multi-drug resistance in a number of human cancer cell lines, extending the efficacy of chemotherapy • Iinhibits the growth of a wide variety of tumor cells
Key References	1. Identification of a nuclear receptor for bile acids. Science, 1999, 284 1362-1365 2. FXR induces the UGT2B4 enzyme in hepatocytes: A potential mechanism of negative feedback control of FXR activity. Gastroenterology, 2003, 124 1926-1940 3. Activation of nuclear factor (erythroid-2 like) factor 2 by toxic bile acids provokes adaptive defense responses to enhance cell survival at the emergence of oxidative stress. Mol Pharmacol, 2007, 72, 1380-1390 4. A natural product that lowers cholesterol as an anatagonist ligand for FXR. Science, 2002, 296, 1703-1706 5. Guggulsterone is a farnesoid X receptor antagonist in coactivator association assays but acts to enhance transcription of bile salt export pump. The Journal of Biological Chemistry, 2003, 278, 10214-10220 6. The hypolipidemic natural product guggulsterone acts as an antagonist of the bile acid receptor. Mol Endocrinol, 2002, 16, 1590-1597