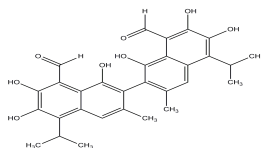


PRODUCT: (±)-Gossypol

ALTERNATE NAME: (±)-2,2'-bis(8-Formyl-1,6,7-trihydroxy-5-isopropyl-3-methylnaphthalene; NSC 56817; NSC 524336; BL 193; Pogodin

CATALOG #: 2579-50, 250

AMOUNT: 50 mg, 250 mg

STRUCTURE:

MOLECULAR FORMULA: C₃₀H₃₀O₈

MOLECULAR WEIGHT: 518.55

CAS No. 303-45-7

APPEARANCE: Yellow solid

SOLUBILITY: DMSO (>10 mg/ml) or EtOH (>10 mg/ml with slight warming)

PURITY: ≥95%

STORAGE: Store at -20°C. Protect from air and light

DESCRIPTION: Isolated from cotton seeds. It causes infertility in a variety of cotton pests and spermatogenesis arrest in humans. Gossypol also has antimalarial properties, preventing the growth of *P. falciparum* at low micromolar concentrations. It inhibits aldose reductase ($K_i = 0.5 \mu\text{M}$). Gossypol also acts as an anticancer agent, inhibiting cell growth in various cancer cell lines, in part by blocking the anti-apoptotic functions of Bcl-2 and Bcl-xL, again at low micromolar concentrations. Also acts as a non-selective competitive inhibitor of NADH binding to LDH, with $K(i)$ values of 1.9, 1.4, and 4.2 μM for LDH-A4, -B4, and -C4, respectively.

REFERENCES: Yu, Y., *et al.* (2001). *Biochem. Pharmacol.* 62, 81-89.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

LDHA Antibody (CT) (**Cat # 6735-100**)
LDHA Antibody (Center) (**Cat # 6736-100**)
Human Recombinant LDHA (**Cat # 6374-100**)
Human Recombinant LDHB (**Cat # 6375-100**)
Sodium oxamate (Cat. No. 2580-1G, 5G)

USAGE: **FOR RESEARCH USE ONLY! Not to be used in humans.**