Embelin



Catalog No: 14118, 14119

Format: 50 mg, 10 mg

Chemical Properties:

MW = 294.8 $C_{17}H_{26}O_4$

CAS 550-24-3

Physical Properties: Dark orange powder; MP = 142-143°C

Names: Embelin, 2,5-Dihydroxy-3-undecyl-2,5-cyclohexadiene-1,4-dione

Pharmacology: Inhibits the lysine acetyltransferase PCAF *in vitro* and *in vivo* (*in vitro* IC $_{50}$ = 7.2 µM). Inhibits H3K9 acetylation in mouse liver tissue while leaving levels of H3K14, H4K8, and H4K12 unchanged (ref 1). Also inhibits X-linked inhibitor of apoptosis (XIAP) (IC $_{50}$ = 4.1 µM, competing with Smac peptide)(ref 2). Binds to the BIR3 domain, preventing XIAP interaction with caspase-9 and Smac. Induces apoptosis and alters gene expression profiles in breast cancer cells (ref 3). Possesses anti-inflammatory and analgesic activity *in vivo* (ref 4). Cell permeable.

Solubilization: May be dissolved in DMSO (30 mg/ml); or ethanol (3 mg/ml, warm)

Fluorescent Properties: N/A

Quality Control:

>98% (HPLC); NMR (Conforms)

References:

1. R Modak et al. ACS Chem. Biol. 2013, 8:1311

2. Z Nikolovska-Coleska et al. J. Med Chem. 2004, 47:2430

3. P Shaw et al. Pharmacol. Rep. 2016, 68:638

4. M Chitra et al. Chemotherapy 1994, 40:109

Storage and Guarantee: Store desiccated as supplied at -20° for up to 2 years. Store solutions at -20°C for up to 1 month. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.