LKT Laboratories, Inc.

Gossypol Acetic Acid

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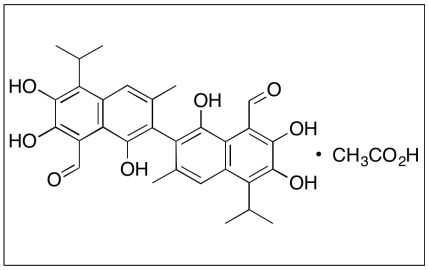
Product Information

Product ID G5875
CAS No. 12542-36-8
Chemical Name 1,1',6,6',7,7'-Hexahydroxy-3,3'-dimethyl-5,5'-bis(1- methylethyl)[2,2'-binaphthalene]-8,8'-dicarboxaldehyde-acetic acid
Synonym 2,2'-bis(8-Formyl-1,6,7-trihydroxy-5-isopropyl-3-methylnaphthalene)-acetic acid



Formula $C_{30}H_{30}O_8 \cdot C_2H_4O_2$
Formula Wt. 578.61
Melting Point 184
Purity ≥98%
Solubility Soluble in DMSO, methanol or ethanol. Insoluble in water.

Bulk quanitites available upon request

Product ID	Size
G5875	250 mg
G5875	1 g

Store Temp 4°C
Ship Temp Ambient

Description Gossypol acetic acid (GA) exhibits anticancer chemotherapeutic, pro-oxidative, antioxidative, and antibacterial activities. GA inhibits Bcl-2/Bcl-xl, enhancing TRAIL/mitochondria-induced apoptosis in breast cancer cells. In animal models, GA delayed the onset of androgen-independent prostate cancer. In macrophages, GA increases production of ROS, upregulates expression of caspases 3 and 9, and decreases the mitochondrial membrane potential, inducing apoptosis. GA increases activity of glutathione peroxidase and inhibits lipid peroxidation but also increases generation of ROS and induces DNA damage. This compound also exhibits antibiotic activity, inhibiting growth of gram negative bacteria such as *Edwardsiella*. Additionally, GA has been studied as a male contraceptive; it inhibits sialyl transferase activity in seminal plasma, decreases tubulin content and spermatocyte mobility, and reversibly inhibits spermatogenesis in vivo.

References

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