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Data Sheet

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Product Name :	Gambogenic acid
Cat. No. :	PC-35432
CAS No. :	173932-75-7
Molecular Formula :	C ₃₈ H ₄₆ O ₈
Molecular Weight :	630.778
Target :	Histone Methyltransferase (HMTase)
Solubility :	10 mM in DMSO

Biological Activity

Gambogenic acid (GNA) is a polyprenylated xanthone isolated from gamboge, shows potent antitumor activity and can effectively inhibit the survival and proliferation of cancer cells.

Gambogenic acid specifically and covalently binds to Cys668 within the **EZH2-SET domain**, trigges EZH2 degradation (IC50=8.6 uM) through COOH terminus of Hsp70-interacting protein (CHIP)-mediated ubiquitination.

Gambogenic acid synergistically potentiates bortezomib-induced apoptosis in multiple myeloma.

Gambogenic acid also induces proteasomal degradation of CIP2A and sensitizes hepatocellular carcinoma to anticancer agents.

References

Xu L, et al. *Cell Death Dis.* 2018 Feb 15;9(3):262. Liu P, et al. *J Cancer.* 2017 Sep 16;8(16):3278-3286. Wang X, et al. *EMBO J.* 2017 May 2;36(9):1243-1260. Li F, et al. *Exp Ther Med.* 2017 May;13(5):2456-2462.

> Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com