Product Information

Zapotin from *Casimiroa edulis* (White Sapote tree)

Catalog Number Z4652
Storage Temperature –20 °C

CAS RN: 14813-19-5
Synonyms: 2',5,6,6'-tetramethoxyflavone

Molecular Weight: 342.34
Molecular formula: C_{19}H_{18}O_{6}

Product Description
Zapotin is a tetramethoxyflavone which is found in leaves and seeds of the *Zapote blanco* tree. Zapotin is a non toxic inducer of cellular differentiation, apoptosis and cell cycle arrest. Hydroxylated flavonoids possess potent anti-invasive and anti-metastatic activities. Treatment with Zapotin markedly suppressed cell line proliferation and increased apoptosis in many colon cancer cell lines studied. Zapotin was found to induce both cell differentiation and apoptosis in cultured human promyelocytic leukemia cells (HL-60 cells). In addition, the compound inhibits 12-O-tetradecanoylphorbol 13-acetate (TPA-c)-induced ornithine decarboxylase (ODC) activity in human bladder carcinoma cells (T24 cells). ODC is a rate-limiting enzyme for the biosynthesis of polyamines in mammalian cells. It is highly induced by growth factors and tumor promoters, and overexpressed in a variety of cancer cell lines. Zapotin inhibits also TPA-induced NF-xB activity in human hepatocellular liver carcinoma cells (HepG2 cells). Thus, Zapotin has the potential to inhibit carcinogenesis and serve as a chemopreventive agent in various biological systems.

Purity: ≥98% by HPLC

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
Store the product sealed at –20 °C. Under these conditions the product is stable for at least 2 years. Soluble in DMSO, methanol, acetonitrile, and ethyl-acetate.

References

Sigma brand products are sold through Sigma-Aldrich, Inc. Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.