

## Catalog # 10-3433 α-Mangostin

CAS# 6147-11-1

Mangostine; Mangostin

1,3,6-Trihydroxy-7-methoxy-2,8-bis(3-methylbut-2-en-1-yl)-9H-xanthen-9-one Lot # X108772

α-Mangostin is a xanthone natural product that has historically been used in traditional folk medicine.<sup>1</sup> It is a potent agonist of human STING (Stimulator of Interferon Genes) and also weakly activates mouse STING.<sup>2</sup> Induces IFN-β production and repolarizes human monocyte-derived M2 macrophages to M1. Improves insulin secretion and protects INS-1 cells from streptozotocin-induced damage.<sup>3</sup> Suppresses the metastasis of human renal carcinoma cells.<sup>4</sup> Synergizes with kinase inhibitors in suppression of proliferation of SK-MEL-2 malignant melanoma cells.<sup>5</sup>

- Mohan et al. (2018), An anti-inflammatory molecular mechanism of action of α-mangostin, the major xanthone from the pericarp of Garcinia mangostana: an in silico, in vitro and in vivo approach; Food Funct., 9 3860
- 2) Zhang et al. (2018), Identification of α-Mangostin as an Agonist of Human STING; Chem. Med. Chem., Aug. 6 epub ahead of print
- Lee et al. (2018), Alpha-Mangostin Improves Insulin Secretion and Protects INS-1 Cells from Streptozotocin-induced Damage; J. Mol. Sci., 19 E1484
- 4) Chen et al. (2017), Alpha-Mangostin Supresses the Metastasis of Human renal Carcinoma Cells by Targeting MEK/ERK Expression and MMP-9 Transcription Activity; Cell Physiol. Biochem., **44** 1460
- 5) Xia and Sun (2018), Synergistic inhibition of cell proliferation by combined targeting with kinase inhibitors and dietary xanthone is a promising strategy for melanoma treatment, Clin. Exp. Dermatol., **43** 149

## **PHYSICAL DATA**

Molecular Weight: 410.46
Molecular Formula: C<sub>24</sub>H<sub>26</sub>O<sub>6</sub>
Purity: 98% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 50 mg/ml)

Physical Description: Yellow solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 1 month.

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