

**Catalog # 10-3433**

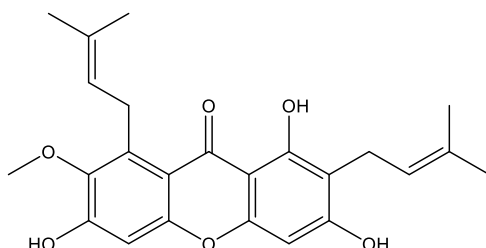
**$\alpha$ -Mangostin**

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



$\alpha$ -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- $\beta$  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>

- 1) Mohan *et al.* (2018), *An anti-inflammatory molecular mechanism of action of  $\alpha$ -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  $\alpha$ -Mangostin as an Agonist of Human STING*; Chem. Med. Chem., Aug. 6 *epub ahead of print*
- 3) 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 Suppresses 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.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**