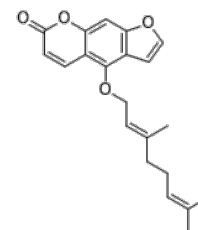


Product Name : Bergamottin
Cat. No. : PC-27657
CAS No. : 7380-40-7
Molecular Formula : C₂₁H₂₂O₄
Molecular Weight : 338.40
Target : Cytochrome P450 (CYPs)
Solubility : 10 mM in DMSO



Biological Activity

Bergamottin (5-Geranyloxypsoralen, Bergamotone) is a bioactive component of bergamot and a competitive inhibitor of cytochrome P450 1A1 (**CYP1A1**) with Ki of 10.7 nM.

Bergamottin ameliorates the progression of osteoarthritis via the Sirt1/NF-kappaB pathway.

Bergamottin inhibits porcine reproductive and respiratory syndrome virus (PRRSV), blocks expression of the non-structural proteins (Nsps), leading to the interruption of replication and transcription complex (RTC) formation and viral dsRNA synthesis.

Bergamottin exhibits inhibitory activity against SARS-CoV-2 in vitro, ex vivo, and in vivo, interferes with multiple stages of virus life cycles, specifically blocking the SARS-CoV-2 spike-mediated membrane fusion and effectively reducing viral RNA synthesis.

References

Olguín-Reyes S, et al. *Food Chem Toxicol.* 2012 Sep;50(9):3094-9.

Baumgart A, et al. *Biochem Pharmacol.* 2005 Feb 15;69(4):657-67.

Qiao RB, et al. *Chin J Traumatol.* 2024 Sep;27(5):295-304.

Zhou M, et al. *Antiviral Res.* 2022 Aug;204:105365.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com