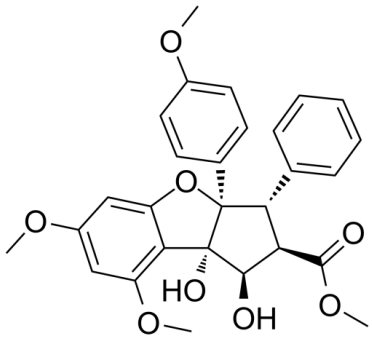
Data Sheet

Product Name:	Aglafoline
Cat. No.:	CS-5352
CAS No.:	143901-35-3
Molecular Formula:	C28H28O8
Molecular Weight:	492.52
Target:	Others
Pathway:	Others
Solubility:	Ethanol : 100 mg/mL (203.04 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Aglafoline inhibits in a selective and concentration-dependent manner the aggregation and ATP release reaction induced in washed rabbit platelets by PAF (platelet-activating factor). The IC50 values of Aglafoline on PAF (3.6 nM)-induced platelet aggregation were about 50 μM. ic50 value: 50 μM Target: PAF in vitro: Aglafoline also inhibits [3H]PAF (3.6 nM) binding to washed rabbit platelets with an IC50 value of 17.8 ± 2.6 μM. The concentration-response curve of PAF-induced platelet aggregation was shifted to the right by Aglafoline with pA2 and pA10 values of 5.97 and 5.04, respectively. Although thromboxane B2 formation caused by collagen and thrombin was partially suppressed by Aglafoline, thromboxane B2 formation caused by ionophore A23187 and arachidonic acid was not affected. Aglafoline inhibited the [3H]inositol monophosphate formation caused by PAF but not that caused by collagen or thrombin in the presence of indomethacin (20 μM). [1] in vivo: The cAMP content of washed rabbit platelets was not affected by Aglafoline. Rat femoral intravenous administration of Aglafoline (10 mg/kg) did not affect blood pressure. However, Aglafoline (10 mg/kg) both prophylactically and therapeutically antagonized PAF (2.5 μg/kg)-induced hypotensive shock in rats. Intravenous PAF (30 ng/kg) caused severe bronchoconstriction in guinea pigs. This effect was completely blocked by Aglafoline. This implies Aglafoline is an effective PAF antagonist not only in vitro, but also in vivo.[1]

References:

[1]. Ko FN, et al. PAF antagonism in vitro and in vivo by aglafoline from Aglaia elliptifolia Merr. Eur J Pharmacol. 1992 Jul 21;218(1):129-35.

CAIndexNames:

1H-Cyclopenta[b]benzofuran-2-carboxylic acid, 2,3,3a,8b-tetrahydro-1,8b-dihydroxy-6,8-dimethoxy-3a-(4-methoxyphenyl)-3-phenyl-, methyl ester, (1R,2R,3S,3aR,8bS)-

SMILES:

O=C([C@H]([C@H]1C2=CC=CC=C2)[C@@H](O)[C@]3(O)[C@@]1(C4=CC=C(OC)C=C4)OC5=CC(OC)=CC(OC)=C35)OC

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