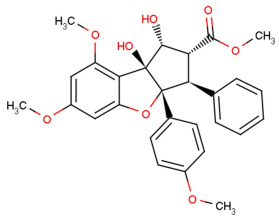
Data Sheet (Cat.No.T10260)

TargetMol
A DRUG SCREENING EXPERT

Aglafoline

Chemical Properties



CAS No.:	143901-35-3
Formula:	C28H28O8
Molecular Weight:	492.52
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Aglafoline inhibits in a 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.
Targets(IC_{50})	Others: None
In vitro	Aglafoline also inhibits [3H]PAF (3.6 nM) binding to washed rabbit platelets (IC50: 17.8 μM). The concentration-response curve of PAF-induced platelet aggregation was shifted to the right by Aglafoline (pA2: 5.97; pA10: 5.04). 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).
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.

Solubility Information

Solubility	Ethanol: 100 mg/mL (203.04 mM) DMSO: 21.43 mg/mL (43.51 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.03 mL	10.152 mL	20.304 mL
5 mM	0.406 mL	2.03 mL	4.061 mL
10 mM	0.203 mL	1.015 mL	2.03 mL
50 mM	0.041 mL	0.203 mL	0.406 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

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.

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