Tris(2,4-di-tert-butylphenyl)phosphate

Cat. No.: HY-136177

CAS No.: 95906-11-9

Molecular Formula: $C_{42}H_{63}O_4P$

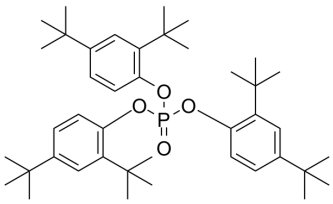
Molecular Weight: 662.92

Target: Phospholipase

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

Ethanol : 50 mg/mL (75.42 mM; Need ultrasonic)

Acetone : 25 mg/mL (37.71 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.5085 mL	7.5424 mL	15.0848 mL
5 mM	0.3017 mL	1.5085 mL	3.0170 mL
10 mM	0.1508 mL	0.7542 mL	1.5085 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% EtOH >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.5 mg/mL (3.77 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% EtOH >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (3.77 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% EtOH >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (3.77 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Tris(2,4-di-tert-butylphenyl)phosphate is an active compound from the leaves of Vitex negundo L. shows anti-inflammatory activity with evidence of inhibition for secretory Phospholipase A_2 ($sPLA_2$) through molecular docking[1].

IC_{50} & Target

$sPLA_2$[1]

In Vivo

Tris(2,4-di-tert-butylphenyl)phosphate (TDTBPP; 50 mg/kg and 70 mg/kg) exhibits significant anti-inflammatory activity in

carrageenan induced paw odema model[1].

Tris(2,4-di-tert-butylphenyl)phosphate (50 mg/kg and 70 mg/kg) reduces the raw paw odema volume significantly[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Vinuchakkaravarthy T, et al. Active compound from the leaves of Vitex negundo L. shows anti-inflammatory activity with evidence of inhibition for secretory Phospholipase A(2) through molecular docking. Bioinformation. 2011;7(4):199-206.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA