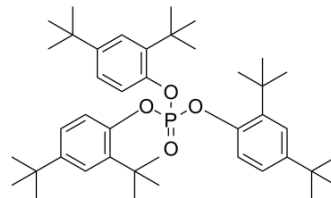


## Tris(2,4-di-tert-butylphenyl)phosphate

<b>Cat. No.:</b>	HY-136177		
<b>CAS No.:</b>	95906-11-9		
<b>Molecular Formula:</b>	C <sub>42</sub> H <sub>63</sub> O <sub>4</sub> P		
<b>Molecular Weight:</b>	662.92		
<b>Target:</b>	Phospholipase		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

Ethanol : 100 mg/mL (150.85 mM; Need ultrasonic)  
DMSO : 2 mg/mL (3.02 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		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

- 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
- 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
- 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<sub>2</sub> (sPLA<sub>2</sub>) through molecular docking<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

sPLA<sub>2</sub><sup>[1]</sup>

#### In Vivo

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

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carrageenan induced paw odema model<sup>[1]</sup>.

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

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

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## REFERENCES

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[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.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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