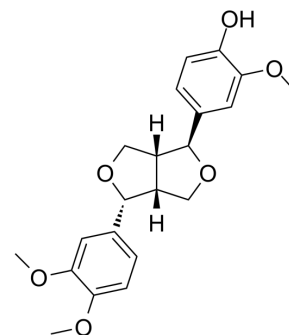


## Phillygenin

<b>Cat. No.:</b>	HY-N0483
<b>CAS No.:</b>	487-39-8
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>24</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	372.41
<b>Target:</b>	Reactive Oxygen Species
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 25 mg/mL (67.13 mM); ultrasonic and warming and heat to 60°C  
H<sub>2</sub>O : < 0.1 mg/mL (ultrasonic) (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.6852 mL	13.4261 mL	26.8521 mL
	5 mM	0.5370 mL	2.6852 mL	5.3704 mL
	10 mM	0.2685 mL	1.3426 mL	2.6852 mL

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

#### In Vivo

- Add each solvent one by one: 50% PEG300 >> 50% saline  
Solubility: 5 mg/mL (13.43 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 3.25 mg/mL (8.73 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 3.25 mg/mL (8.73 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 3.25 mg/mL (8.73 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Phillygenin (Phillygenol) is an active ingredient from Forsythia with many medicinal properties, such as antioxidant, reducing blood lipid, inhibition of low density lipoprotein oxidation.

#### In Vitro

- Phillygenin shows a greater inhibition on mouse B16 melanoma cells potential than vincristine<sup>[1]</sup>.
- phillygenin had notable scavenging activity against DPPH, ABTS radicals, as well as potent reducing power in FRAP assay.

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	MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	The reference for rat is 5.6 mg/m l ( i.v). MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Phytother Res. 2024 Feb 15.
- Biosci BioTech Bioch. 2021 Jan 9.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Ye LH et al. Determination of phillygenin in rat plasma by high-performance liquid chromatography and its application to pharmacokinetic studies. Eur J Drug Metab Pharmacokinet, 2013 Sep, 38(3):201-7.
- [2]. Song W et al. Interaction between phillygenin and human serum albumin based on spectroscopic and molecular docking. Spectrochim Acta A Mol Biomol Spectrosc, 2012 Jan, 85(1):120-6.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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