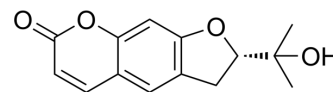


## S-(+)-Marmesin

<b>Cat. No.:</b>	HY-N2176		
<b>CAS No.:</b>	13849-08-6		
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>14</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	246.26		
<b>Target:</b>	COX; Lipoxygenase		
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 2 mg/mL (8.12 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.0607 mL	20.3037 mL	40.6075 mL
	5 mM	0.8121 mL	4.0607 mL	8.1215 mL
	10 mM	---	---	---

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

### BIOLOGICAL ACTIVITY

<b>Description</b>	S-(+)-Marmesin is a natural coumarin, exhibiting COX-2/5-LOX dual inhibitory activity.	
<b>IC<sub>50</sub> &amp; Target</b>	COX-2	5-LOX
<b>In Vitro</b>	S-(+)-Marmesin ((+)-marmesin) shows affinity at the recombinant psoralen synthase, with a K <sub>m</sub> of 1.5 ± 0.5 μM, exceeding the substrate affinities of other enzymes of the CYP71 subfamily involved in plant secondary metabolism <sup>[1]</sup> . S-(+)-Marmesin ((+)-marmesin) shows COX-2/5-LOX dual inhibitory activity <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. Larbat R, et al. Molecular cloning and functional characterization of psoralen synthase, the first committed monooxygenase of furanocoumarin biosynthesis. J Biol Chem. 2007 Jan 5;282(1):542-54. Epub 2006 Oct 26.

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

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