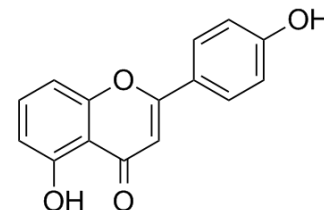


## 4',5-Dihydroxyflavone

<b>Cat. No.:</b>	HY-N1881		
<b>CAS No.:</b>	6665-67-4		
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>10</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	254.24		
<b>Target:</b>	Lipoxygenase; Glucosidase		
<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

DMSO : ≥ 155 mg/mL (609.66 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.9333 mL	19.6665 mL	39.3329 mL
	5 mM	0.7867 mL	3.9333 mL	7.8666 mL
	10 mM	0.3933 mL	1.9666 mL	3.9333 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.58 mg/mL (10.15 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.58 mg/mL (10.15 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

4',5-Dihydroxyflavone is a soybean LOX-1 and yeast α-Glucosidase inhibitor, with an K<sub>i</sub> of 102.6 μM for soybean LOX-1 and an IC<sub>50</sub> of 66 μM for yeast α-glucosidase. LOX-1 is short for Lectin-like oxidized low-density lipoprotein receptor-1.

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

K<sub>i</sub>: 102.6 μM (LOX-1)<sup>[1]</sup>.  
 IC<sub>50</sub>: 66 μM (α-glucosidase)<sup>[2]</sup>.

### REFERENCES

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[1]. Ribeiro D, et al. Inhibition of LOX by flavonoids: a structure-activity relationship study. *Eur J Med Chem*. 2014 Jan 24;72:137-45.

[2]. Proença C, et al.  $\alpha$ -Glucosidase inhibition by flavonoids: an in vitro and in silico structure-activity relationship study. *J Enzyme Inhib Med Chem*. 2017 Dec;32(1):1216-1228.

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

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