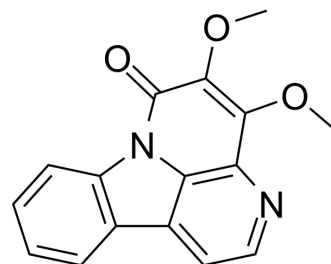


## 4,5-Dimethoxycanthin-6-one

Cat. No.:	HY-N1882
CAS No.:	18110-87-7
Molecular Formula:	C <sub>16</sub> H <sub>12</sub> N <sub>2</sub> O <sub>3</sub>
Molecular Weight:	280.28
Target:	Cytochrome P450
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	4,5-Dimethoxycanthin-6-one is a potent and uncompetitive inhibitor of CYP1A2-mediated phenacetin O-deethylation with an IC <sub>50</sub> value of 1.7 μM and a K <sub>i</sub> value of 2.6 μM. 4,5-Dimethoxycanthin-6-one, as an alkaloid, is isolated from the wood of <i>Picrasma quassioides</i> BENNET (Simaroubaceae) <sup>[1][2]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	CYP1A2 1.7 μM (IC <sub>50</sub> )	CYP1A2 2.6 μM (K <sub>i</sub> )
<b>In Vitro</b>	4,5-Dimethoxycanthin-6-one is a potent and uncompetitive inhibitor of CYP1A2-mediated phenacetin O-deethylation with an IC <sub>50</sub> value of 1.7 μM and a K <sub>i</sub> value of 2.6 μM <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. Taichi O, et al. Studies on the Constituents of *Picrasma quassioides* BENNET. III. The Alkaloidal Constituents

[2]. Miao X, et al. In vitro metabolism of 4, 5-dimethoxycanthin-6-one by human liver microsomes and its inhibition on human CYP1A2. *Life Sci.* 2017;190:46-51.

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

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