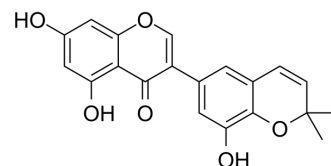


## Semilicoisoflavone B

<b>Cat. No.:</b>	HY-N1280
<b>CAS No.:</b>	129280-33-7
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>16</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	352.34
<b>Target:</b>	Amyloid-β
<b>Pathway:</b>	Neuronal Signaling
<b>Storage:</b>	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (141.91 mM; ultrasonic and warming and heat to 60°C)																					
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent</th> <th rowspan="2">Mass</th> <th colspan="3">Concentration</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Preparing Stock Solutions</td> <td>1 mM</td> <td>2.8382 mL</td> <td>14.1908 mL</td> <td>28.3817 mL</td> </tr> <tr> <td>5 mM</td> <td>0.5676 mL</td> <td>2.8382 mL</td> <td>5.6763 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2838 mL</td> <td>1.4191 mL</td> <td>2.8382 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	1 mM	2.8382 mL	14.1908 mL	28.3817 mL	5 mM	0.5676 mL	2.8382 mL	5.6763 mL	10 mM	0.2838 mL	1.4191 mL	2.8382 mL
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	Please refer to the solubility information to select the appropriate solvent.																					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 1.25 mg/mL (3.55 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (3.55 mM); Clear solution</li> </ol>																					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Semilicoisoflavone B, an isoflavone, mainly derived from Glycyrrhiza uralensis Fisch.. Semilicoisoflavone B reduces amyloid β (Aβ) secretion by inhibiting β-secretase-1 (BACE1) expression and activity. Semilicoisoflavone B decreases BACE1 expression mainly through increasing PPARγ expression and inhibiting STAT3 phosphorylation <sup>[1]</sup> .
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### REFERENCES

[1]. Gu MY, et al. Glycyrrhiza uralensis and Semilicoisoflavone B Reduce Aβ Secretion by Increasing PPARγ Expression and Inhibiting STAT3 Phosphorylation to Inhibit BACE1 Expression. Mol Nutr Food Res. 2018 Mar;62(6):e1700633.

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

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