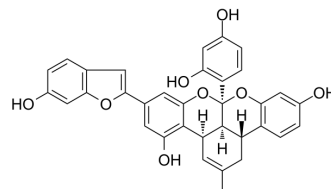


## Mulberrofuran G

<b>Cat. No.:</b>	HY-N3239
<b>CAS No.:</b>	87085-00-5
<b>Molecular Formula:</b>	C <sub>34</sub> H <sub>26</sub> O <sub>8</sub>
<b>Molecular Weight:</b>	562.57
<b>Target:</b>	NADPH Oxidase; HBV
<b>Pathway:</b>	Metabolic Enzyme/Protease; Anti-infection
<b>Storage:</b>	4°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 (88.88 mM; Need ultrasonic)																									
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th>Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td><b>Preparing Stock Solutions</b></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1 mM</td> <td></td> <td>1.7776 mL</td> <td>8.8878 mL</td> <td>17.7756 mL</td> </tr> <tr> <td>5 mM</td> <td></td> <td>0.3555 mL</td> <td>1.7776 mL</td> <td>3.5551 mL</td> </tr> <tr> <td>10 mM</td> <td></td> <td>0.1778 mL</td> <td>0.8888 mL</td> <td>1.7776 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass	1 mg	5 mg	10 mg	<b>Preparing Stock Solutions</b>					1 mM		1.7776 mL	8.8878 mL	17.7756 mL	5 mM		0.3555 mL	1.7776 mL	3.5551 mL	10 mM		0.1778 mL	0.8888 mL	1.7776 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 (2.22 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 (2.22 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 1.25 mg/mL (2.22 mM); Clear solution</li> </ol>																									

### BIOLOGICAL ACTIVITY

<b>Description</b>	Mulberrofuran G protects ischemic injury-induced cell death via inhibition of NOX4-mediated ROS generation and ER stress [1]. Mulberrofuran G shows moderate inhibiting activity of hepatitis B virus (HBV) DNA replication with IC <sub>50</sub> of 3.99 μM [2].
<b>IC<sub>50</sub> &amp; Target</b>	NOX4

### REFERENCES

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[1]. Hong S, Kwon J, Kim DW, Lee HJ, Lee D, Mar W. Mulberrofuran G Protects Ischemic Injury-induced Cell Death via Inhibition of NOX4-mediated ROS Generation and ER Stress. *Phytother Res.* 2017;31(2):321-329.

[2]. Geng CA, Ma YB, Zhang XM, et al. Mulberrofuran G and isomulberrofuran G from *Morus alba* L.: anti-hepatitis B virus activity and mass spectrometric fragmentation. *J Agric Food Chem.* 2012;60(33):8197-8202.

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

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