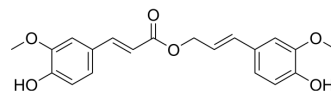


## Coniferyl ferulate

<b>Cat. No.:</b>	HY-N1916
<b>CAS No.:</b>	63644-62-2
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>20</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	356.37
<b>Target:</b>	Gutathione S-transferase; P-glycoprotein
<b>Pathway:</b>	Metabolic Enzyme/Protease; Membrane Transporter/Ion Channel
<b>Storage:</b>	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (280.61 mM; Need ultrasonic)																	
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th rowspan="2">Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>2.8061 mL</td> <td>14.0304 mL</td> <td>28.0607 mL</td> </tr> <tr> <td>5 mM</td> <td>0.5612 mL</td> <td>2.8061 mL</td> <td>5.6121 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2806 mL</td> <td>1.4030 mL</td> <td>2.8061 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass	1 mg	5 mg	10 mg	1 mM	2.8061 mL	14.0304 mL	28.0607 mL	5 mM	0.5612 mL	2.8061 mL	5.6121 mL	10 mM	0.2806 mL	1.4030 mL	2.8061 mL
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10 mM	0.2806 mL	1.4030 mL	2.8061 mL															
	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; 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (7.02 mM); Suspended solution; Need ultrasonic</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (7.02 mM); Clear solution</li> </ol>																	

### BIOLOGICAL ACTIVITY

<b>Description</b>	Coniferyl ferulate, a strong inhibitor of glutathione S-transferase (GST), reverses multidrug resistance and downregulates P-glycoprotein. Coniferyl ferulate shows strong inhibition of human placental GST with an IC <sub>50</sub> of 0.3 μM.
<b>IC<sub>50</sub> &amp; Target</b>	Glutathione S-transferase <sup>[1]</sup> P-glycoprotein <sup>[1]</sup>

### REFERENCES

[1]. Chen C, et al. Coniferyl Ferulate, a Strong Inhibitor of Glutathione S-Transferase Isolated from Radix Angelicae sinensis, Reverses Multidrug Resistance and

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

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