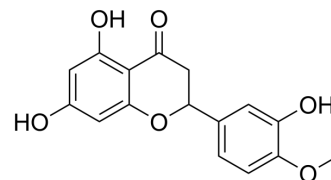


## (Rac)-Hesperetin

<b>Cat. No.:</b>	HY-N0168A												
<b>CAS No.:</b>	69097-99-0												
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>14</sub> O <sub>6</sub>												
<b>Molecular Weight:</b>	302.28												
<b>Target:</b>	p38 MAPK; Apoptosis; Autophagy												
<b>Pathway:</b>	MAPK/ERK Pathway; Apoptosis; Autophagy												
<b>Storage:</b>	<table> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
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### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 125 mg/mL (413.52 mM; Need ultrasonic)																			
	<table border="1"> <thead> <tr> <th rowspan="2">Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td><b>1 mM</b></td> <td>3.3082 mL</td> <td>16.5410 mL</td> <td>33.0819 mL</td> </tr> <tr> <td><b>5 mM</b></td> <td>0.6616 mL</td> <td>3.3082 mL</td> <td>6.6164 mL</td> </tr> <tr> <td><b>10 mM</b></td> <td>0.3308 mL</td> <td>1.6541 mL</td> <td>3.3082 mL</td> </tr> </tbody> </table>	Concentration	Mass			1 mg	5 mg	10 mg	<b>1 mM</b>	3.3082 mL	16.5410 mL	33.0819 mL	<b>5 mM</b>	0.6616 mL	3.3082 mL	6.6164 mL	<b>10 mM</b>	0.3308 mL	1.6541 mL	3.3082 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; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.88 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (6.88 mM); Clear solution</li> </ol>																			

### BIOLOGICAL ACTIVITY

<b>Description</b>	(Rac)-Hesperetin is the racemate of Hesperetin. Hesperetin is a natural flavanone, and acts as a potent and broad-spectrum inhibitor against human UGT activity. Hesperetin induces apoptosis via p38 MAPK activation.
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### REFERENCES

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- [2]. Liu D, et al. Inhibitory Effect of Hesperetin and Naringenin on Human UDP-Glucuronosyltransferase Enzymes: Implications for Herb-Drug Interactions. *Biol Pharm Bull.*

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[3]. Shagirtha K, et al. Neuroprotective efficacy of hesperetin against cadmium induced oxidative stress in the brain of rats. Toxicol Ind Health. 2016 Nov 1. pii: 0748233716665301

[4]. Li Q, et al. Hesperetin Induces Apoptosis in Human Glioblastoma Cells via p38 MAPK Activation. Nutr Cancer. 2019 Jul 11:1-8.

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

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