



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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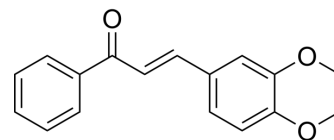
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## 3,4-Dimethoxychalcone

<b>Cat. No.:</b>	HY-W083373A
<b>CAS No.:</b>	5416-71-7
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>16</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	268.31
<b>Target:</b>	Bacterial; Autophagy
<b>Pathway:</b>	Anti-infection; Autophagy
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (372.70 mM; Need ultrasonic)																					
	<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>3.7270 mL</td> <td>18.6352 mL</td> <td>37.2703 mL</td> </tr> <tr> <td>5 mM</td> <td>0.7454 mL</td> <td>3.7270 mL</td> <td>7.4541 mL</td> </tr> <tr> <td>10 mM</td> <td>0.3727 mL</td> <td>1.8635 mL</td> <td>3.7270 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	1 mM	3.7270 mL	18.6352 mL	37.2703 mL	5 mM	0.7454 mL	3.7270 mL	7.4541 mL	10 mM	0.3727 mL	1.8635 mL	3.7270 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: ≥ 2.5 mg/mL (9.32 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (9.32 mM); Clear solution</li> </ol>																					

### BIOLOGICAL ACTIVITY

<b>Description</b>	3,4-Dimethoxychalcone is a Caloric restriction mimetics (CRMs). 3,4-Dimethoxychalcone induces the deacetylation of cytoplasmic proteins and stimulates autophagy flux. 3,4-Dimethoxychalcone can be used for cardiac and cancer diseases research <sup>[1]</sup> .
<b>In Vitro</b>	3,4-Dimethoxychalcone (30 μM, 8 h) induces autophagic flux in HepG2 cells and U2OS cells <sup>[1]</sup> . 3,4-Dimethoxychalcone (30 μM, 6 h) stimulates the translocation of TFEB and TFE3 to the nucleus in U2OS cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	3,4-Dimethoxychalcone (230 mg/kg for intraperitoneal injection) induces the nuclear translocation of TFEB and TFE3 of liver and heart tissues in Female C57/BL6 mice <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

- [1]. Okolo EN, et al. New chalcone derivatives as potential antimicrobial and antioxidant agent. Sci Rep. 2021 Nov 5;11(1):21781.
- [2]. Chen G, et al. 3,4-Dimethoxychalcone induces autophagy through activation of the transcription factors TFE3 and TFEB. EMBO Mol Med. 2019 Nov 7;11(11):e10469.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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