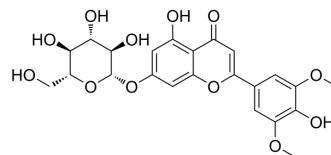


## Tricin 7-O-β-D-glucopyranoside

Cat. No.:	HY-N9587
CAS No.:	32769-01-0
Molecular Formula:	C <sub>23</sub> H <sub>24</sub> O <sub>12</sub>
Molecular Weight:	492.43
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Tricin 7-O-β-D-glucopyranoside is a potent and orally active neuroprotective agent. Tricin 7-O-β-D-glucopyranoside induces <a href="#">Apoptosis</a> . Tricin 7-O-β-D-glucopyranoside decreases the expression of TNF-α induced phosphor-κB-α, phosphor-NF-κB, HMGB1 <sup>[1]</sup> .																
<b>In Vitro</b>	<p>Tricin 7-O-β-D-glucopyranoside (4-64 μM; 12 h) induces apoptosis in a dose-dependent manner after oxygen-glucose deprivation for 3 h followed by 12 h incubation in SH-SY5Y cells<sup>[1]</sup>.</p> <p>Tricin 7-O-β-D-glucopyranoside (16, 32 μM; 12 h) decreases the expression of TNF-α (20 ng/ml for 30 min) induced phosphor-κB-α, phosphor-NF-κB, HMGB1 in SH-SY5Y cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Apoptosis Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>SH-SY5Y cells</td> </tr> <tr> <td>Concentration:</td> <td>2, 4, 8, 16, 32, 64 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>12 h</td> </tr> <tr> <td>Result:</td> <td>Induced cell apoptosis after oxygen-glucose deprivation for 3 h followed by 12 h incubation with neurobasal medium with the apoptosis rate of 35.6%.</td> </tr> </table> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>SH-SY5Y cells</td> </tr> <tr> <td>Concentration:</td> <td>16, 32 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>12 h</td> </tr> <tr> <td>Result:</td> <td>Blocked TNF-α (20 ng/ml for 30 min) induced IκB-α and NF-κB phosphorylation, and reduced HMGB1 expression.</td> </tr> </table>	Cell Line:	SH-SY5Y cells	Concentration:	2, 4, 8, 16, 32, 64 μM	Incubation Time:	12 h	Result:	Induced cell apoptosis after oxygen-glucose deprivation for 3 h followed by 12 h incubation with neurobasal medium with the apoptosis rate of 35.6%.	Cell Line:	SH-SY5Y cells	Concentration:	16, 32 μM	Incubation Time:	12 h	Result:	Blocked TNF-α (20 ng/ml for 30 min) induced IκB-α and NF-κB phosphorylation, and reduced HMGB1 expression.
Cell Line:	SH-SY5Y cells																
Concentration:	2, 4, 8, 16, 32, 64 μM																
Incubation Time:	12 h																
Result:	Induced cell apoptosis after oxygen-glucose deprivation for 3 h followed by 12 h incubation with neurobasal medium with the apoptosis rate of 35.6%.																
Cell Line:	SH-SY5Y cells																
Concentration:	16, 32 μM																
Incubation Time:	12 h																
Result:	Blocked TNF-α (20 ng/ml for 30 min) induced IκB-α and NF-κB phosphorylation, and reduced HMGB1 expression.																
<b>In Vivo</b>	<p>Tricin 7-O-β-D-glucopyranoside (50, 100, 200 and 400 mg/kg; p.o.) shows neuroprotective potential in rats with ischemia and reperfusion (I/R)<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>																

---

Animal Model:	Adult male Sprague-Dawley rats <sup>[1]</sup>
Dosage:	50, 100, 200 and 400 mg/kg
Administration:	P.o.
Result:	Decreased neurological deficit scores, reduced brain infarct volume and brain water content, inhibited NF- $\kappa$ B activation and reduced HMGB1 expression.

---

## REFERENCES

[1]. Jiang WL, et al. Tricin 7-glucoside protects against experimental cerebral ischemia by reduction of NF- $\kappa$ B and HMGB1 expression. Eur J Pharm Sci. 2012 Jan 23;45(1-2):50-7.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA