SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

Nitecapone

Cat. No.: HY-106842

CAS No.: 116313-94-1

Molecular Formula: $C_{12}H_{11}NO_6$

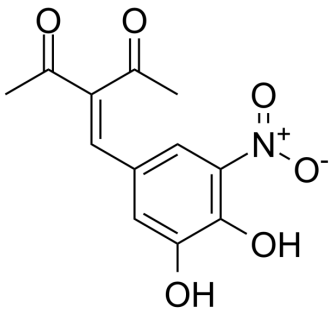
Molecular Weight: 265.22

Target: COMT

Pathway: Metabolic Enzyme/Protease; Neuronal Signaling

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (188.52 mM; Need ultrasonic)

Preparing Stock Solutions	Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
	1 mM	3.7705 mL	18.8523 mL	37.7045 mL
	5 mM	0.7541 mL	3.7705 mL	7.5409 mL
	10 mM	0.3770 mL	1.8852 mL	3.7705 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (7.84 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Nitecapone (OR-462) is an orally active and short-acting catechol-O-methyltransferase (COMT) inhibitor with gastroprotective and antioxidant properties. Nitecapone (OR-462) scavenges reactive oxygen and nitric radicals and prevents lipid peroxidation[1][2][3].

In Vitro

Nitecapone (1-100 μM) reducesd GSH (reduced glutathione) depletion induced by ROO^- by 11-38% and oxidation to oxidized glutathione (GSSG) by 32-45%[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Nitecapone (30 mg/kg, ip daily for 13 days) reduces development and symptoms of neuropathic pain after spinal nerve ligation in rats[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Eighty-six male Wistar rats, weighing 140-350 g[3].
Dosage:	30 mg/kg (3.3 mL/kg).
Administration:	IP, once daily for 13 days.
Result:	Selectively and specifically inhibits COMT in the peripheral tissues, and to some extent in the CNS for ca. 3 h. Increased the thresholds for the mechanical stimuli and thus reduced mechanical allodynia. Reduced the number of positive reactions of the ipsilateral paws when compared with the baselines in the nitecapone-pretreated rats.

REFERENCES

[1]. Y J Suzuki, et al. Antioxidant properties of nitecapone (OR-462). Free Radic Biol Med. 1992 Nov;13(5):517-25.

[2]. Marcocci L, et al. Nitecapone: a nitric oxide radical scavenger. Biochemistry and Molecular Biology International, 01 Oct 1994, 34(3):531-541.

[3]. Oleg Kambur, et al. Nitecapone reduces development and symptoms of neuropathic pain after spinal nerve ligation in rats. Eur J Pain. 2011 Aug;15(7):732-40.

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