Product Datasheet

Nitecapone

Catalog No. **BP-01638** · CAS **116313-94-1** · Form **free base** · Physical state **solid** · Color **light yellow to yellow** · Version **1.0** · Revision **2026-09-11**

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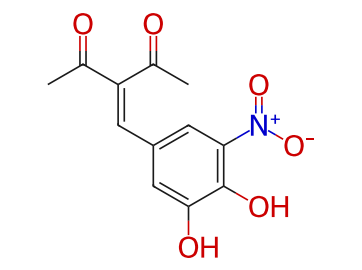
Target	Research area
COMT	**Neurological Disease; Inflammation/Immunology**

Molecular formula	$C_{12}H_{11}NO_6$
Molecular weight	**265.2188**

STRUCTURE



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.

BIOLOGICAL ACTIVITY

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%

In Vivo

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

SOLUBILITY

Soluble in DMSO

In vitro	DMSO : 50 mg/mL

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.

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