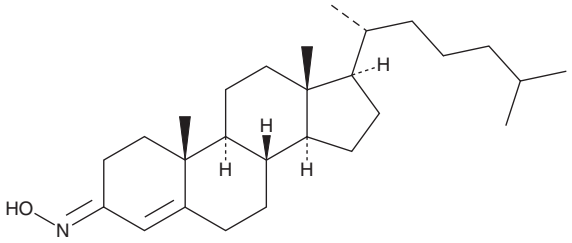
PRODUCT INFORMATION

TRO 19622

Item No. 21264

CAS Registry No.:	22033-87-0
Formal Name:	cholest-4-en-3-one, oxime
Synonym:	NSC 21311
MF:	$C_{27}H_{45}NO$
FW:	399.7
Purity:	≥95% (mixture of isomers)
UV/Vis.:	λ_{max}: 242 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

TRO 19622 is supplied as a crystalline solid. A stock solution may be made by dissolving the TRO 19622 in the solvent of choice. TRO 19622 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of TRO 19622 in these solvents is approximately 20, 0.1, and 2 mg/ml, respectively.

TRO 19622 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TRO 19622 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. TRO 19622 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

TRO 19622 is an orally bioavailable mitochondrial-targeted neuroprotective agent that binds to and inhibits opening of the mitochondrial permeability transition pore (mPTP).[1,2] It prevents mPTP opening induced by arachidonic acid (Item No. 90010) in HeLa cells when used at a concentration of 10 µM.[1] TRO 19622 promotes survival of motor neurons *in vitro* in a concentration-dependent manner in the absence of neurotrophic factors (EC_{50} = 3.2 µM) and *in vivo* in a neonatal rat model of facial nerve axotomy when administered at a dose of 100 mg/kg per day.[2] It delays onset of motor deficits and extends survival in the $SOD1^{G93A}$ transgenic model of amyotrophic lateral sclerosis (ALS). TRO 19622 (30 and 100 mg/kg) also increases the latency to paw withdrawal in a mechanical hyperalgesia test in rat models of streptozotocin-induced diabetic and vincristine-induced neuropathic pain but not in models of acute, inflammatory, or injury-induced pain.[3]

References

1. Bordet, T., Berna, P., Abitbol, J.-L., *et al.* Olesoxime (TRO19622): A novel mitochondrial-targeted neuroprotective compound. *Pharmaceuticals (Basel)* **3(2)**, 345-368 (2010).
2. Bordet, T., Buisson, B., Michaud, M., *et al.* Identification and characterization of cholest-4-en-3-one, oxime (TRO19622), a novel drug candidate for amyotrophic lateral sclerosis. *J. Pharmacol. Exp. Ther.* **322(2)**, 709-720 (2007).
3. Bordet, T., Buisson, B., Michaud, M., *et al.* Specific antinociceptive activity of cholest-4-en-3-one, oxime (TRO19622) in experimental models of painful diabetic and chemotherapy-induced neuropathy. *J. Pharmacol. Exp. Ther.* **326(2)**, 623-632 (2008).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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