

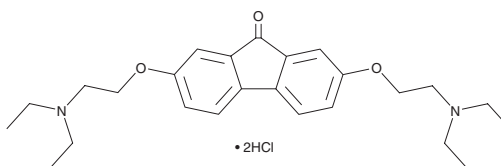
PRODUCT INFORMATION



Tilorone (hydrochloride)

Item No. 17868

CAS Registry No.: 27591-69-1
Formal Name: 2,7-bis[2-(diethylamino)ethoxy]-9H-fluoren-9-one, dihydrochloride
Synonym: NSC 143969
MF: $C_{25}H_{34}N_2O_3 \cdot 2HCl$
FW: 483.5
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 268 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

Tilorone (hydrochloride) is supplied as a crystalline solid. Aqueous solutions of tilorone (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of tilorone (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Tilorone is an orally active, antiviral compound that induces interferon production and is reported to have antitumor, anti-inflammatory, and neuroprotective actions.¹⁻³ With chronic administration, tilorone induces lysosomal glycosaminoglycan storage, rendering glycosaminoglycans resistant to enzymatic degradation.⁴

References

1. Stringfellow, D.A. and Glasgow, L.A. Tilorone hydrochloride: An oral interferon-inducing agent. *Antimicrob. Agents Chemother.* **2**(2), 73-78 (1972).
2. Wissing, M.D., Dadon, T., Kim, E., *et al.* Small-molecule screening of PC3 prostate cancer cells identifies tilorone dihydrochloride to selectively inhibit cell growth based on cyclin-dependent kinase 5 expression. *Oncol. Rep.* **32**, 419-424 (2014).
3. Ratan, R.R., Siddiq, A., Aminova, L., *et al.* Small molecule activation of adaptive gene expression: Tilorone or its analogs are novel potent activators of hypoxia inducible factor-1 that provide prophylaxis against stroke and spinal cord injury. *Ann. N. Y. Acad. Sci.* **1147**, 383-394 (2011).
4. Fischer, J. Tilorone-induced lysosomal storage of glycosaminoglycans in cultured corneal fibroblasts: Biochemical and physicochemical investigations. *Biochem. J.* **312**, 215-222 (1995).

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.

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