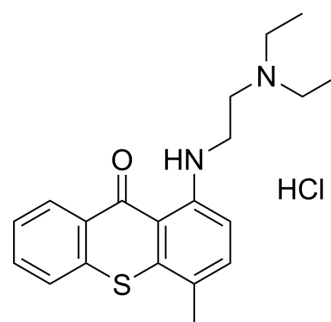


Lucanthone hydrochloride

Cat. No.:	HY-B2098A
CAS No.:	548-57-2
Molecular Formula:	C ₂₀ H ₂₅ ClN ₂ OS
Molecular Weight:	376.94
Target:	Parasite; Autophagy
Pathway:	Anti-infection; Autophagy
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Lucanthone hydrochloride is an endonuclease inhibitor of Apurinic endonuclease-1 (APE-1).
IC₅₀ & Target	APE-1 ^[1]
In Vitro	<p>Lucanthone hydrochloride is a novel inhibitor of autophagy that induces cathepsin D-mediated apoptosis. To investigate the anticancer activity of Lucanthone hydrochloride, cell viability is measured by MTT assay. Lucanthone hydrochloride reduces cell viability to a similar extent in a panel of seven breast cancer cell lines. In addition, a direct comparison reveals that Lucanthone hydrochloride is significantly more potent than Chloroquine (CQ) at reducing breast cancer cell viability with a mean IC₅₀ of 7.2 μM versus 66 μM for CQ. Measurement of cell viability in two representative cell lines (MDA-MB-231 and BT-20) by ATPlite assay and trypan blue exclusion reveals comparable results^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Chowdhury SM, et al. Graphene nanoribbons as a drug delivery agent for lucanthone mediated therapy of glioblastoma multiforme. *Nanomedicine*. 2015 Jan;11(1):109-18.
- [2]. Carew JS, et al. Lucanthone is a novel inhibitor of autophagy that induces cathepsin D-mediated apoptosis. *J Biol Chem*. 2011 Feb 25;286(8):6602-13.

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

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