

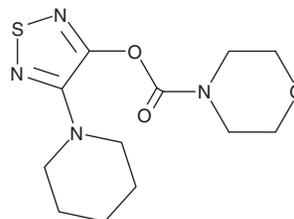
PRODUCT INFORMATION



Lalistat 1

Item No. 23891

CAS Registry No.: 501104-16-1
Formal Name: 4-morpholinecarboxylic acid,
4-(1-piperidinyl)-1,2,5-thiadiazol-3-yl ester
MF: C₁₂H₁₈N₄O₃S
FW: 298.4
Purity: ≥98%
UV/Vis.: λ_{max}: 302 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

Lalistat 1 is supplied as a crystalline solid. A stock solution may be made by dissolving the lalistat 1 in the solvent of choice. Lalistat 1 is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of lalistat 1 in these solvents is approximately 20 mg/ml.

Description

Lalistat 1 is an inhibitor of lysosomal acid lipase (LAL; IC₅₀ = 68 nM using purified human LAL).¹ It is selective for LAL over human pancreatic and bovine milk lipoprotein lipases up to a concentration of 10 μM.² Lalistat 1 (0.01-10 μM) reduces cholesterol accumulation in lysosome-like storage organelles in GM03123 human fibroblast cells deficient in NPC1, a membrane protein found in late endosomes, in a concentration-dependent manner but has little effect on cholesterol accumulation in NPC1-deficient CHO cells.

References

1. Rosenbaum, A.I., Rujoi, M., Huang, A.Y., *et al.* Chemical screen to reduce sterol accumulation in Niemann-Pick C disease cells identifies novel lysosomal acid lipase inhibitors. *Biochim Biophys. Acta.* **1791(12)**, 1155-1165 (2009).
2. Rosenbaum, A.I., Cosner, C.C., Mariani, C.J., *et al.* Thiadiazole carbamates: Potent inhibitors of lysosomal acid lipase and potential Niemann-Pick type C disease therapeutics. *J. Med. Chem.* **53(14)**, 5281-5289 (2010).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM