

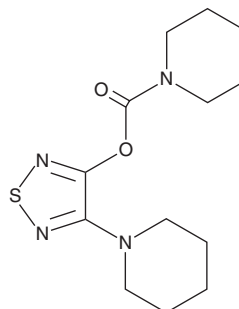
PRODUCT INFORMATION



Lalistat 2

Item No. 25347

CAS Registry No.: 1234569-09-5
Formal Name: 1-piperidinecarboxylic acid, 4-(1-piperidiny)-1,2,5-thiadiazol-3-yl ester
MF: C₁₃H₂₀N₄O₂S
FW: 296.4
Purity: ≥95%
UV/Vis.: λ_{max}: 306 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 2 is supplied as a crystalline solid. A stock solution may be made by dissolving the lalistat 2 in the solvent of choice. Lalistat 2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of lalistat 2 in these solvents is approximately 20 mg/ml.

Lalistat 2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, lalistat 2 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Lalistat 2 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Lalistat 2 is an inhibitor of lysosomal acid lipase (LAL; IC₅₀ = 152 nM using purified human LAL).¹ It blocks lipid clearance induced by the autophagy enhancers MSL and MSL-7 in HeLa cells preloaded with palmitic acid (Item No. 10006627) and oleic acid (Item No. 90260).²

References

1. 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).
2. Lim, H., Lim, Y.-M., Kim, K.H., *et al.* A novel autophagy enhancer as a therapeutic agent against metabolic syndrome and diabetes. *Nat. Commun.* **9**:1438 (2018).

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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