

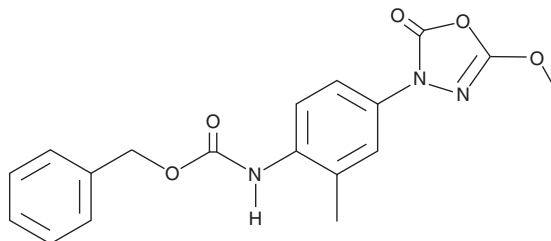
PRODUCT INFORMATION



CAY10499

Item No. 10007875

CAS Registry No.: 359714-55-9
Formal Name: [4-(5-methoxy-2-oxo-1,3,4-oxadiazol-3(2H)-yl)-2-methylphenyl]-carbamic acid, phenylmethyl ester
MF: C₁₈H₁₇N₃O₅
FW: 355.3
Purity: ≥98%
UV/Vis.: λ_{max}: 206, 256 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

CAY10499 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10499 in the solvent of choice. CAY10499 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CAY10499 in ethanol is approximately 2 mg/ml and approximately 20 mg/ml in DMSO and DMF.

CAY10499 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10499 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10499 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10499 is a non-selective lipase inhibitor (IC₅₀s = 144, 90, and 14 nM for human recombinant MAGL, HSL, and FAAH, respectively).^{1,2} It also inhibits ATGL, DAGLa, ABHD6, and CES1 by 95, 60, 90, and 95%, respectively, when used at a concentration of 5 μM.³ CAY10499 inhibits the growth of MCF-7, MDA-MB-231, COV318, and OVCAR-3 cancer cells (IC₅₀s = 4.2, 46, 106.7, and 79.8 mM, respectively).² *In vivo*, CAY10499 reduces FRUC diet- and AIN-93M diet-induced increases in cytosolic lipase activity in rats.⁴

References

1. Ali, Y.B., Müller, G., Petry, S., *et al.* Kinetic characterization and specific inhibition of hormone sensitive lipase. *Chem. Phys. Lipids* **136(2)**, 155 (2005).
2. Granchi, C., Rizzolio, F., Bordoni, V., *et al.* 4-Aryliden-2-methyloxazol-5(4H)-one as a new scaffold for selective reversible MAGL inhibitors. *J. Enzyme Inhib. Med. Chem.* **31(1)**, 137-146 (2016).
3. Iglesias, J., Lamontagne, J., Erb, J., *et al.* Simplified assays of lipolysis enzymes for drug discovery and specificity assessment of known inhibitors. *J. Lipid Res.* **57(1)**, 131-141 (2016).
4. Rodrigues, H.A., Moreira, C.C.L., Mario, É.G., *et al.* Differential modulation of cytosolic lipases activities in liver and adipose tissue by high-carbohydrate diets. *Endocrine* **53(2)**, 423-432 (2016).

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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