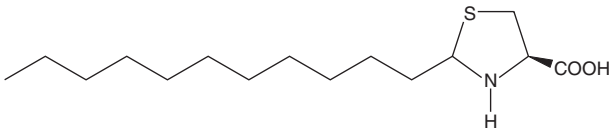
PRODUCT INFORMATION

CAY10444

Item No. 10005033

CAS Registry No.:	298186-80-8
Formal Name:	2-undecyl-4R-thiazolidinecarboxylic acid
Synonym:	BML-241
MF:	$C_{15}H_{29}NO_2S$
FW:	287.5
Purity:	≥98%
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

CAY10444 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10444 in the solvent of choice, which should be purged with an inert gas. CAY10444 is soluble in the organic solvent dimethyl formamide (DMF) at a concentration of approximately 0.5 mg/ml.

CAY10444 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10444 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10444 has a solubility of approximately 0.15 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10444 is a sphingosine-1-phosphate receptor 3 ($S1P_3$) antagonist.[1] It inhibits S1P-induced calcium mobilization in CHO cells expressing human $S1P_3$ (IC_{50} = 11.6 µM). CAY10444 (5 µM) inhibits S1P-induced growth and migration of MH7A rheumatoid fibroblast-like synoviocyte cells.[2] It inhibits the localization and release of IL-1β and prostaglandin E_2 (PGE_2; Item No. 14010) in MH7A cells when used at a concentration of 5 µM. CAY10444 (17.4 µM) also inhibits Na^+/K^+-ATPase activity in HepG2 cells.[3]

References

1. Koide, Y., Hasegawa, T., Takahashi, A., *et al.* Development of novel EDG3 antagonists using a 3D database search and their structure-activity relationships. *J. Med. Chem.* **45(21)**, 4629-4638 (2002).
2. Wang, M., Wu, H., Wang, R., *et al.* Inhibition of sphingosine 1-phosphate (S1P) receptor 1/2/3 ameliorates biological dysfunction in rheumatoid arthritis fibroblast-like synoviocyte MH7A cells through Gαi/Gαs rebalancing. *Clin. Exp. Pharmacol. Physiol.* **48(8)**, 1080-1089 (2021).
3. Al Alam, N. and Kreydiyyeh, S.I. FTY720P inhibits hepatic Na^+-K^+ ATPase via S1PR2 and PGE2. *Biochem. Cell Biol.* **94(4)**, 371-377 (2016).

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