# **PRODUCT** INFORMATION



CYM 5541

Item No. 15190

CAS Registry No.:	945128-26-7	
Formal Name:	N,N-dicyclohexyl-5-cyclopropyl-3-	
	isoxazolecarboxamide	
Synonyms:	CID-17253208, ML-249	
MF:	C <sub>19</sub> H <sub>28</sub> N <sub>2</sub> O <sub>2</sub>	
FW:	316.4	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 232 nm	
Supplied as:	A crystalline solid	0N 0
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

# Laboratory Procedures

CYM 5541 is supplied as a crystalline solid. A stock solution may be made by dissolving the CYM 5541 in the solvent of choice, which should be purged with an inert gas. CYM 5541 is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

# Description

The sphingosine 1-phosphate (S1P) receptor S1P<sub>3</sub> has roles in vasodilation, epithelial barrier function, cardioprotection, fibrosis, immunity, and inflammation.<sup>1,2</sup> CYM 5541 is a selective, allosteric agonist of  $S1P_3$  (EC<sub>50</sub> = 72-132 nM).<sup>3,4</sup> It less effectively activates  $S1P_1$  (EC<sub>50</sub> = 28-38  $\mu$ M) and is ineffective at  $S1P_{2}^{2}$ ,  $S1P_{4}^{2}$ , and  $S1P_{5}$  as well as a panel of other receptors, ion channels and transporters.<sup>3</sup>

# References

- 1. Choi, J.W., Lee, C.W., and Chun, J. Biological roles of lysophospholipid receptors revealed by genetic null mice: An update. Biochim. Biophys. Acta 1781, 531-539 (2008).
- 2. Rosen, H., Stevens, R.C., Hanson, M., et al. Sphingosine-1-phosphate and its receptors: Structure, signaling, and influence. Annu. Rev. Biochem. 82, 637-662 (2013).
- 3. Guerrero, M., Poddutoori, R., Pinacho-Crisostomo, F., et al. Probe development efforts for an allosteric agonist of the sphingosine 1-phosphate receptor 3 (S1P<sub>2</sub>), in Probe Reports from the NIH Molecular Libraries Program,1 (2011).
- 4. Jo, E., Bhhatarai, B., Repetto, E., et al. Novel selective allosteric and bitopic ligands for the S1P3 receptor. ACS Chem. Biol. 7(12), 1975-1983 (2012).

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.

# WARRANTY AND LIMITATION OF REMEDY

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