

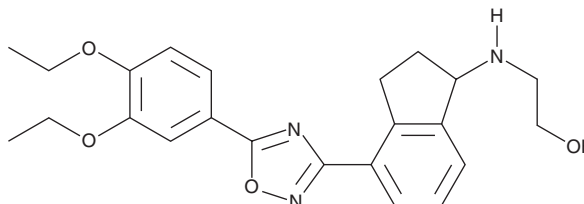
# PRODUCT INFORMATION



## CYM 5442

Item No. 16925

**CAS Registry No.:** 1094042-01-9  
**Formal Name:** 2-[[4-[5-(3,4-diethoxyphenyl)-1,2,4-oxadiazol-3-yl]-2,3-dihydro-1H-inden-1-yl]amino]-ethanol  
**MF:** C<sub>23</sub>H<sub>27</sub>N<sub>3</sub>O<sub>4</sub>  
**FW:** 409.5  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 233, 282, 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

CYM 5442 is supplied as a crystalline solid. A stock solution may be made by dissolving the CYM 5442 in the solvent of choice, which should be purged with an inert gas. CYM 5442 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CYM 5442 in these solvents is approximately 0.25 mg/ml.

### Description

Sphingosine-1-phosphate (S1P) is an extracellular lipid mediator whose major effects are mediated through five distinct G protein-coupled receptors, S1P<sub>1</sub>/EDG-1, S1P<sub>2</sub>/EDG-5, S1P<sub>3</sub>/EDG-3, S1P<sub>4</sub>/EDG-6, and S1P<sub>5</sub>/EDG-8. S1P<sub>1</sub> is important for vascular development and lymphocyte maturation, migration, and trafficking.<sup>1</sup> CYM 5442 is a full agonist for S1P<sub>1</sub> internalization, phosphorylation, and ubiquitination (EC<sub>50</sub> = 1.35 nM).<sup>2</sup> It is ineffective at S1P<sub>2</sub>, S1P<sub>3</sub>, S1P<sub>4</sub>, and S1P<sub>5</sub> at concentrations up to 10 μM.<sup>2</sup> CYM 5442 has been found to activate S1P<sub>1</sub>-mediated p42/p44 MAPK phosphorylation in CHO-K1 cells transfected with S1P<sub>1</sub> with an EC<sub>50</sub> value of 46 nM.<sup>2</sup> At 50 nM, CYM 5442 can induce S1P<sub>1</sub>-dependent lymphopenia in mice, decreasing B and T cells by 65 and 85%, respectively.<sup>2</sup>

### References

1. 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).
2. Gonzalez-Cabrera, P.J., Jo, E., Sanna, M.G., *et al.* Full pharmacological efficacy of a novel S1P<sub>1</sub> agonist that does not require S1P-like headgroup interactions. *Mol. Pharmacol.* **74**(5), 1308-1318 (2008).

#### 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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