Sphingosine-1-Phosphate Lyase Fluorogenic Substrate
Item No. 13238

Formal Name: 2S-ammonio-3R-hydroxy-5-((2-oxo-2H-chromen-7-yl)oxy)pentyl hydrogen phosphate
Synonym: S1P Lyase Fluorogenic Substrate
MF: C₁₄H₁₈NO₈P
FW: 359.3
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that sphingosine-1-phosphate (S1P) lyase fluorogenic substrate be stored as supplied at -20°C. It should be stable for at least one year.

S1P lyase fluorogenic substrate is supplied as a crystalline solid. A stock solution may be made by dissolving the S1P lyase fluorogenic substrate in the solvent of choice. S1P lyase fluorogenic substrate is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of S1P lyase fluorogenic substrate in these solvents is approximately 0.5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of S1P lyase fluorogenic substrate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of S1P lyase fluorogenic substrate in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

S1P lyase is a pyridoxal-dependent enzyme that cleaves S1P at the C2-C3 bond to yield ethanolamine phosphate and hexadecanal. S1P lyase fluorogenic substrate is a substrate of S1P lyase, leading to the production of the fluorescent product umbelliferone (7-hydroxycoumarin) under appropriate conditions.¹ This compound is intended to be used to monitor or measure S1P lyase activity.

Reference

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/13238

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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