Sphingosine-1-phosphate, D-erythro

S1P receptor agonist

Sphingosine-1-phosphate (S1P) is a putative second messenger that mobilizes calcium from intracellular stores *via* an IP_3-independent pathway, activates phospholipase D, and stimulates quiescent Swiss 3T3 fibroblast growth. S1P regulates a variety of cellular responses, including survival, cytoskeletal remodeling, chemotaxis etc. via the activation of cell surface EDG receptors. S1P also promotes angiogenesis.

Citations: 34 View Online »

Ordering Information

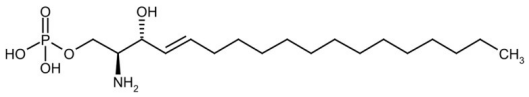
Order Online »

BML-SL140-0001	1mg

Manuals, SDS & CofA

View Online »

- Endogenous signaling molecule
- Second messenger involved in calcium mobilization, cell motility, and cell proliferation
- highly cited


O
HO
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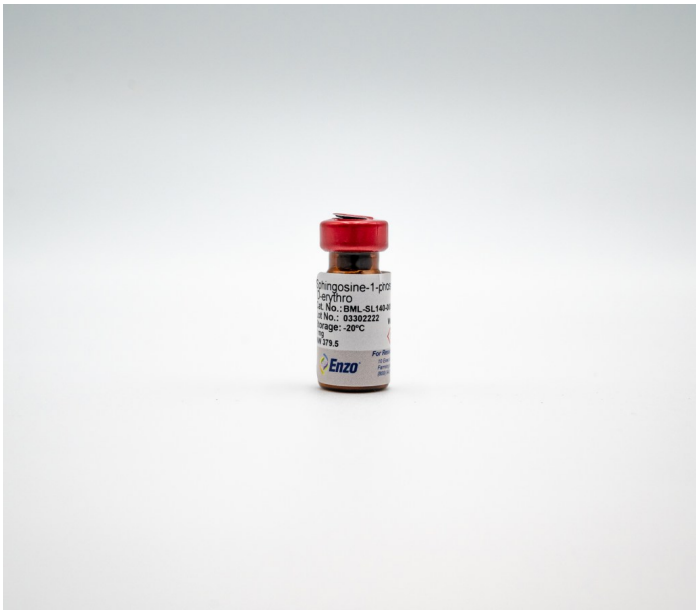
NH2
CH3


Enzo

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended.
Handling	Packaged under inert gas.
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	(E)-D-erythro-2-amino-1-(dihydrogenphosphate)-4-octadecene-1,3-diol, S1P
Appearance	White solid.
CAS	26993-30-6
Couple Target	EDG receptor, S1P receptor
Couple Type	Activator
Formula	$C_{18}H_{38}NO_5P$
Identity	Identity determined by MS and NMR.
MW	379.5
Purity	≥98% (TLC)

Solubility	Sparingly soluble in 1:1 ethanol:water. Addition of small amounts of acetic acid may help dissolve this product. Soluble in warm methanol.For delivery of sphingosine-1-phosphate to cells, prepare a 125µM stock in 4mg/ml BSA as follows: Dissolve sphingosine-1-phosphate (S-1-P) in methanol (0.5 mg/ml). This may require boiling (65°C), with occasional replacement of evaporated methanol. Crushing of solid prior to addition of methanol and crushing and stirring during heating is helpful. Aliquot desired amounts of methanol stock to tubes. Evaporate the solvent with a stream of nitrogen, swirling to deposit a thin film on the inside of the tube. Aliquots may be stored at -20 °C at this point or dissolved with enough 4mg/ml BSA (fatty acid free Bovine Serum Albumin in water; 37°C, 30 min. with repeated vortexing) to make 125 µM stock.
Source	Synthetic.

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