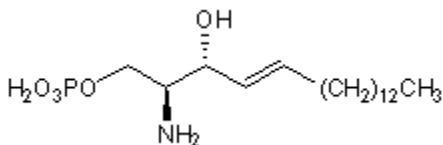


Sphingosine-1-phosphate

Cat. No. 1370



Chemical Name: (*E*)-D-erythro-2-amino-1-(dihydrogen phosphate)-4-octadecene-1,3-diol

Biological Activity

Endogenous second messenger involved in the control of cell proliferation and motility, and Ca²⁺ mobilization. Acts as an agonist at sphingosine-1-phosphate receptors (S1P₁₋₅) and as an activator of GPR3, GPR6 and GPR12. Effectors regulated include p38 MAP kinase, PLC, adenylyl cyclase, myosin light chain phosphatase and focal adhesion kinase.

Technical Data

M.Wt:

379.48

Formula:

C₁₈H₃₈NO₃P

Purity:

>98 %

Storage:

Desiccate at +4°C

CAS No:

26993-30-6

The technical data provided above is for guidance only.

For batch specific data refer to the Certificate of Analysis.

References

van Koppen *et al* (1996) Activation of a high affinity G_i protein-coupled plasma membrane receptor by sphingosine-1-phosphate. *J.Biol.Chem.* **271** 2082. PMID: [8567663](#).

Pyne and Pyne (2000) Sphingosine 1-phosphate signalling via the endothelial differentiation gene family of G-protein-coupled receptors. *Pharmacol.Ther.* **88** 115. PMID: [11150592](#).

Essler *et al* (2002) Sphingosine 1-phosphate dynamically regulates myosin light chain phosphatase activity in human endothelial cells. *Cell.Signal.* **14** 607. PMID: [11955953](#).

Uhlenbrock *et al* (2002) Sphingosine 1-phosphate is a ligand of the human gpr3, gpr6 and gpr12 family of constitutively active G protein-coupled receptors. *Cell.Signal.* **14** 941. PMID: [12220620](#).

If you know of a relevant citation for this product [please let us know](#).

Keywords: Sphingosine-1-phosphate, supplier, Endogenous, agonists, S1P1, S1P2, S1P3, S1P4, S1P5, Receptors, EDG, Sphingosine-1-Phosphate, GPR3, GPR6, GPR12

Phone: (800) 343-7475 (612) 379-2956

Fax: (612) 656-4400

Email: customerservice@rndsystems.com