



Sphingosine-1-phosphate (d18:1(14Z))

Cat. No.:	OB0626WX-3957
Appearance:	Crystalline solid
Purity:	≥95%
Identity:	Confirmed by TLC.
Size:	500 µg; 1 mg; 2 mg; 5 mg

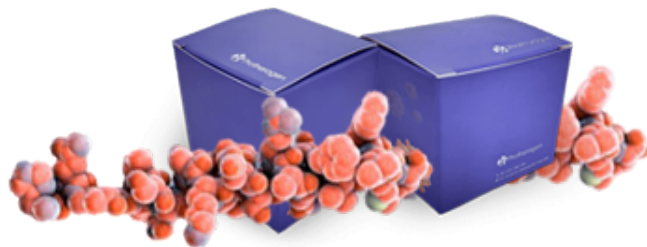
This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	Sphingosine-1-phosphate (d18:1(14Z)) is a structurally distinct sphingolipid isomer characterized by a cis double bond at the 14-15 position. This structural geometry contrasts with the conventional trans double bond found at the 4-5 position of standard sphingosine-1-phosphate matrices, providing a unique molecular tool for investigating stereospecific lipid-receptor binding and biophysical membrane dynamics.
Synonyms	(2S,3R,Z)-2-amino-3-hydroxyoctadec-14-en-1-yl dihydrogen phosphate; S1P (d18:1(14Z))
Formula	C ₁₈ H ₃₈ NO ₅ P
Formula Weight	379.5

Specification

Solubility in Other Solvents	NaOH: 4 mg/mL
InChI	InChI=1S/C18H38NO5P/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-18(20)17(19)16-24-25(21,22)23/h4-5,17-18,20H,2-3,6-16,19H2,1H3,(H2,21,22,23)/b5-4-/t17-,18+/m0/s1
InChI Key	ZCDSBTUVYZHMTN-JTDRTSHGSA-N
Canonical SMILES	O=P(O)(O)OC[C@H](N)[C@H](O)CCCCCCCCC/C=C\CCC
Stability	1 year
Storage	Storage at -20°C.



Applications

Sphingosine-1-phosphate (d18:1(14Z)) serves as a bioactive sphingolipid for investigating sphingolipid metabolism, lipid signaling, and receptor-mediated cellular processes. It supports studies of sphingosine phosphate biology, lipid-mediated signal transduction, and analytical characterization of sphingolipid metabolites in biochemical and lipidomic research.