



LKT Laboratories, Inc.

Sphingosine-1-Phosphate

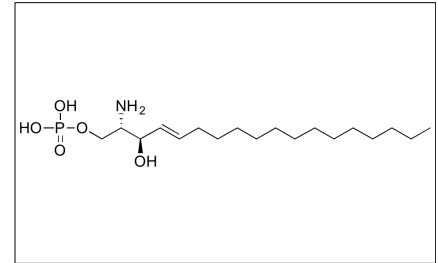
Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID S6130
CAS No. 26993-30-6
Chemical Name 4-Octadecene-1,3-diol, 2-amino-, 1-(dihydrogen phosphate), (2S,3R,4E)-

Synonym D-erythro-Sphingosine-1-phosphate

Formula C₁₈H₃₈NO₅P
Formula Wt. 379.47
Melting Point 155° C
Purity ≥98%
Solubility Soluble in methanol.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
S6130	1 mg	\$205.90

Store Temp -20° C

Ship Temp Ambient

Description Sphingosine-1-phosphate (S1P) is an endogenous signaling sphingolipid produced from metabolism of ceramides. S1P binds the S1P receptor and may inhibit HDACs. S1P exhibits neuroprotective activity as well as both pro-inflammatory and anti-inflammatory properties, depending on the model. S1P increases neuron viability and upregulates expression of Bcl-2 and Bcl-xl, inhibiting glucose deprivation stress. S1P upregulates expression of PAR4, promoting cell migration and COX-2 expression in vitro. Clinically, S1P preserves fertility and gonadal function in subjects exposed to cytotoxic agents such as chemotherapeutic compounds.

References Czubowicz K, Cieřlik M, Pyszko J, et al. Sphingosine-1-Phosphate and Its Effect on Glucose Deprivation/Glucose Reload Stress: From Gene Expression to Neuronal Survival. *Mol Neurobiol.* 2014 Jul 24. [Epub ahead of print]. PMID: 25056275.

Mahajan-Thakur S, Sostmann BD, Fender AC, et al. Sphingosine-1-phosphate induces thrombin receptor PAR-4 expression to enhance cell migration and COX-2 formation in human monocytes. *J Leukoc Biol.* 2014 Jul 2. [Epub ahead of print]. PMID: 24990321.

Nguyen-Tran DH, Hait NC, Sperber H, et al. Molecular mechanism of sphingosine-1-phosphate action in Duchenne muscular dystrophy. *Dis Model Mech.* 2014 Jan;7(1):41-54. PMID: 24077965.

Zelinski MB, Murphy MK, Lawson MS, et al. In vivo delivery of FTY720 prevents radiation-induced ovarian failure and infertility in adult female nonhuman primates. *Fertil Steril.* 2011 Mar 15;95(4):1440-5.e1-7. PMID: 21316047.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.