PRODUCT INFORMATION



FTY720 Phosphate

Item No. 10008639

CAS Registry No.: 402615-91-2

Formal Name: 2-amino-2-[2-(4-octylphenyl)ethyl]-1,3-

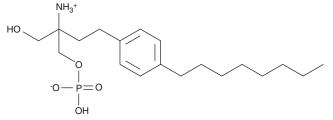
propanediol, 1-(dihydrogen phosphate)

Synonym: MF: $C_{19}H_{34}NO_5P$ 387.5 FW:

Purity: ≥98% Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 vears

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

FTY720 phosphate is supplied as a crystalline solid. A stock solution may be made by dissolving the FTY720 phosphate in the solvent of choice, which should be purged with an inert gas. FTY720 phosphate is slightly soluble with sonication or vortexing in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 0.2 mg/ml. FTY720 phosphate is also soluble in chloroform at a concentration of approximately 0.5 mg/ml.

Description

FTY720 is a derivative of ISP-1 (myriocin), a fungal metabolite of the Chinese herb Iscaria sinclarii as well as a structural analog of sphingosine. It is a novel immune modulator that prolongs allograft transplant survival in numerous models by inhibiting lymphocyte emigration from lymphoid organs.¹ In vivo, FTY720 is phosphorylated by sphingosine kinase to the physiologically active phosphoric acid ester. 2,3 FTY720 phosphate acts as a potent agonist at four of the sphingosine-1-phosphate (S1P) receptors $(S1P_1, S1P_3, S1P_4, and S1P_5)$, with IC_{50} values of 0.2-6 nM.²⁻⁴

References

- 1. Brinkmann, V., Pinschewer, D.D., Feng, L., et al. FTY720: Altered lymphocyte traffic results in allograft protection. Transplantation 72(5), 764-769 (2001).
- Brinkmann, V., Davis, M.D., Heise, C.E., et al. The immune modulator FTY720 targets sphingosine 1-phosphate receptors. J. Biol. Chem. 277(24), 21453-21457 (2002).
- 3. Mandala, S., Hajdu, R., Bergstrom, J., et al. Alteration of lymphocyte trafficking by sphingosine-1-phosphate receptor agonists. Science 296(5566), 346-349 (2002).
- 4. Forrest, M., Sun, S.Y., Hajdu, R., et al. Immune cell regulation and cardiovascular effects of sphingosine 1-phosphate receptor agonists in rodents are mediated via distinct receptor subtypes. J. Pharmacol. Exp. Ther. 309(2), 758-768 (2004).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 01/22/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM