

Product Data Sheet

Product Name: SLF1081851

Cat. No.: GC66459

Chemical Properties

Cas. No. 2763730-97-6

Formula $C_{21}H_{33}N_3O$

M.Wt 343.51

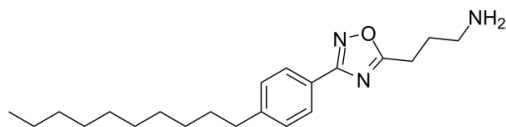
Solubility

Storage 4°C, protect from light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

SLF1081851 is a **Spns2** inhibitor, inhibits **S1P** release ($IC_{50}=1.93 \mu M$). SLF1081851 plays a key role in development and immune system^{[1][2]}.

Sphingosine 1-phosphate (S1P) is a pleiotropic signaling molecule, and Spns2 exerts the functions to maintain lymph S1P^[1].

SLF1081851 (compound 16d) (0-5 μM ; 18-20 h) inhibits S1P release with an IC_{50} value of 1.93 μM in Hela cells^[1].

Caution: Product has not been fully validated for medical applications. For research use only.

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SLF1081851 (0-30 μ M; 20 min) inhibits mSphK1 (recombinant mouse SphK) (10 μ M) and mSphK2 (5 μ M) in a dose-dependent manner and suggests at least 15-fold selectivity (SphK1 $IC_{50} \geq 30$ μ M; SphK2 $IC_{50} \approx 30$ μ M)^[1].

SLF1081851 (20 mg/kg; i.p., 4 h postdose) significantly inhibits circulating lymphocytes and plasma S1P, and recapitulates the genetic phenotype of Spns2 null mice^[1].

Animal Model: C57BL/6 mice^[1]

Dosage: 20 mg/kg

Administration: Intraperitoneal injection; blood was drawn 4 h postdose

Result: Significantly decreased circulating lymphocyte count and plasma S1P concentration.

Animal Model: SpragueDawley mice (4-week-old)^[1]

Dosage: 10 mg/kg

Administration: Intraperitoneal injection; single dose; measured at 0, 0.5, 1, 2, 4, 6, and 24 h postdose

Result: Reached a maximum concentration of 5 μ M in blood at 2 h with drug levels sustained at ≥ 2 μ M for at least 24 h, proved a half-life of over 8 h in rats. The appearance of SPNS2-IN-1 in circulation correlated with a maximal decrease in lymphocyte count at 4 h (25% lower compared to time =0).

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