

Product Data Sheet

Product Name: AKP-11
 Cat. No.: GC45681

Chemical Properties

Cas. No. 1220973-37-4

SMILES C1C1=C(OCCC)C=CC(C2=NC(C3=CC=C(OC(C(CO)(N)CO)=C4)C4=C3)=NO2)=C1

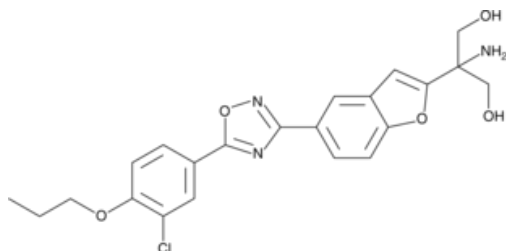
Formula C₂₂H₂₂ClN₃O₅ M.Wt 443.9

Solubility DMF: 5 mg/ml, DMSO: 20 mg/ml Storage Store at -20°C

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

AKP-11 is an agonist of sphingosine-1-phosphate receptor 1 (S1P1) with an EC₅₀ value of 0.047 μM for [35S]GTPγS binding to CHO-K1 cell membranes expressing the human receptor.¹ It decreases surface expression of S1P1 and increases phosphorylation of Akt and ERK in CHO cells expressing S1P1-HA when used at a concentration of 100 nM.² AKP-11 (1.3 and 3 mg/kg) reduces protein levels of IFN-γ and IL-17 in spinal cord tissue and decreases disease severity in a rat model of experimental autoimmune encephalomyelitis (EAE). It decreases peripheral counts of total lymphocytes and total, CD4⁺, CD8⁺, and CD26L⁺ T cells in an EAE rat model, as well as in health control animals, when administered at a dose of 1.3 mg/kg.

[2. Samuvel, D.J., Saxena, N., Dhindsa, J.S., et al. AKP-11 - A novel S1P1 agonist with favorable safety profile attenuates experimental autoimmune encephalomyelitis in rat model of multiple sclerosis. PLoS One 10(10):e0141781, (2015).

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

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