

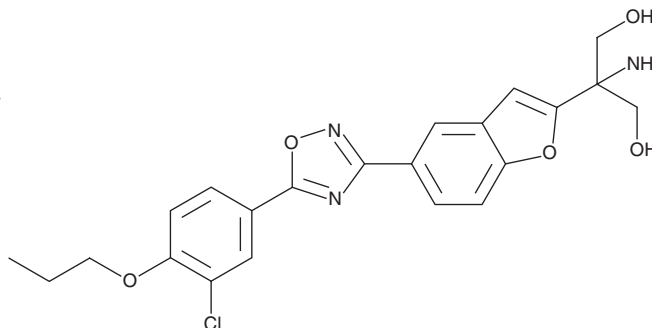
PRODUCT INFORMATION



AKP-11

Item No. 27670

CAS Registry No.: 1220973-37-4
Formal Name: 2-amino-2-[5-[5-(3-chloro-4-propoxyphenyl)-1,2,4-oxadiazol-3-yl]-2-benzofuranyl]-1,3-propanediol
MF: C₂₂H₂₂ClN₃O₅
FW: 443.9
Purity: ≥95%
UV/Vis.: λ_{max}: 225, 273 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

AKP-11 is supplied as a crystalline solid. A stock solution may be made by dissolving the AKP-11 in the solvent of choice, which should be purged with an inert gas. AKP-11 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of AKP-11 in these solvents is approximately 20 and 5 mg/ml, respectively.

Description

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 healthy control animals, when administered at a dose of 1.3 mg/kg.

References

- Gill, G.S. and Grobelny, D.W. S1P receptors modulators and their use thereof. *Akaal Pharma Pty Ltd. US009707205* (2009).
- 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).

WARNING

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

SAFETY DATA

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

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