PRODUCT INFORMATION



AUY954

Item No. 9000548

CAS Registry No.: 820240-77-5

Formal Name: N-[[2-[2-(trifluoromethyl)[1,1'-biphenyl]-4-

yl]benzo[b]thien-5-yl]methyl]-β-alanine

MF: $C_{25}H_{20}F_3NO_2S$

FW: 455.5 **Purity:**

 λ_{max} : 213, 263, 311 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

AUY954 is supplied as a crystalline solid. A stock solution may be made by dissolving the AUY954 in the solvent of choice, which should be purged with an inert gas. AUY954 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of AUY954 in these solvents is approximately 30 mg/ml.

AUY954 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AUY954 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AUY954 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AUY954 is an orally bioavailable and selective agonist of the sphingosine-1-phosphate receptor 1 $(S1P_1; EC_{50} = 1.2 \text{ nM})$ for stimulating GTP γ S binding to $S1P_1$ in CHO cells). It is highly selective for the $S1P_1$ receptor with EC₅₀ values of >10,000, 1,210, >1,000, and 340 nM for S1P₂, S1P₃, S1P₄, and S1P₅ receptors, respectively. AUY954 reduces circulating lymphocytes and prevents rejection of rat heart allografts. In a rat model of experimental autoimmune neuritis, chronic treatment with AUY954 (10 mg/kg), starting on the day of immunization, almost completely prevents peripheral paralysis.² In the same model, it also decreases T cell, B cell, and macrophage infiltration and perivascular demyelination in sciatic nerves.

References

- 1. Pan, S., Mi, Y., Pally, C., et al. A monoselective sphingoine-1-phosphate receptor-1 agonist prevents allograft rejection in a stringent rat heart transplantation model. Chem. Biol. 13(11), 1227-1234 (2006).
- Zhang, Z.Y., Zhang, Z., Zug, C., et al. AUY954, a selective S1P₁ modulator, prevents experimental autoimmune neuritis. J. Neuroimmunol. 216(1-2), 59-65 (2009).

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.

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