

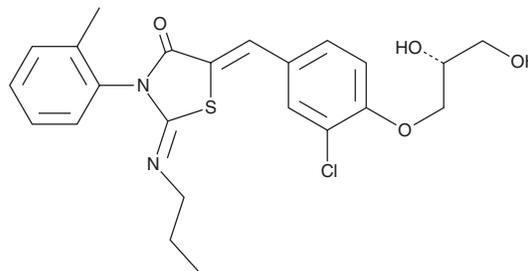
PRODUCT INFORMATION



Ponesimod

Item No. 22053

CAS Registry No.: 854107-55-4
Formal Name: (2Z)-5Z-[[3-chloro-4-[(2R)-2,3-dihydroxypropoxy]phenyl]methylene]-3-(2-methylphenyl)-2-(propylimino)-4-thiazolidinone
MF: C₂₃H₂₅ClN₂O₄S
FW: 461.0
Purity: ≥98%
UV/Vis.: λ_{max}: 242, 345 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

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

Ponesimod is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ponesimod should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ponesimod has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ponesimod is a potent agonist of sphingosine-1-phosphate receptor 1 (S1P₁/EDG-1; IC₅₀s = 6, >10,000, 2,068, 1,956, and 142 nM for S1P₁-S1P₅, respectively, in a radioligand binding assay).¹ It selectively activates S1P₁ in a GTPγS assay (EC₅₀s = 5.7, >10,000, 105, 1,108, and 59.1 nM, for S1P₁-S1P₅, respectively). Ponesimod (3-100 mg/kg) reduces the number of circulating lymphocytes in rats in a dose-dependent manner. It reduces edema, protein extravasation, neutrophil activity, and skin levels of the proinflammatory cytokines IL-1β, IL-6, IFN-γ, and TNF-α in a mouse model of delayed-type hypersensitivity at a dose of 30 mg/kg.² Ponesimod (30 mg/kg) also prevents footpad swelling in a rat model of adjuvant-induced arthritis.

References

1. Bolli, M.H., Abele, S., Binkert, C., *et al.* 2-Imino-thiazolidin-4-one derivatives as potent, orally active S1P₁ receptor agonists. *J. Med. Chem.* **53**(10), 4198-4211 (2010).
2. Piali, L., Froidevaux, S., Hess, P., *et al.* The selective sphingosine 1-phosphate receptor 1 agonist ponesimod protects against lymphocyte-mediated tissue inflammation. *J. Pharmacol. Exp. Ther.* **337**(2), 547-556 (2011).

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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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