

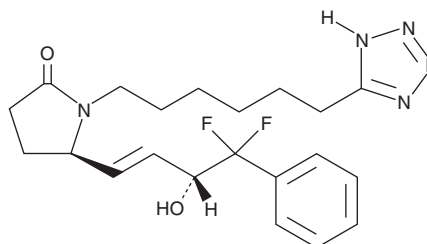
PRODUCT INFORMATION



L-902,688

Item No. 10007712

CAS Registry No.: 634193-54-7
Formal Name: 5-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]-1-[6-(2H-tetrazol-5R-yl)hexyl]-2-pyrrolidinone
MF: C₂₁H₂₇F₂N₅O₂
FW: 419.5
Purity: ≥98%
Supplied as: A solution in methanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

L-902,688 is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of L-902,688 in these solvents is approximately 30 mg/ml.

L-902,688 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methanolic solution of L-902,688 should be diluted with the aqueous buffer of choice. L-902,688 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Prostaglandin E₂ (PGE₂) activates four E prostanoid (EP) receptors, EP₁₋₄. EP₄ is a G_s protein-coupled receptor that, by elevating the second messenger cAMP, plays important roles in bone formation and resorption, cancer, and atherosclerosis.¹⁻³ L-902,688 is a highly potent agonist of the human PGE₂ receptor, EP₄. It demonstrates a K_i value of 0.38 nM and an EC₅₀ value of 0.6 nM and is >4,000-fold selective for EP₄ over other EP and prostanoid receptors.⁴ L-902,688 induces thermal hyperalgesia when injected into guinea pig forepaw and increases vasodilation of human pulmonary vein.^{5,6}

References

1. Li, M., Thompson, D.D., and Paralkar, V.M. *International Orthopaedics* **31**, 767-772 (2007).
2. Hawcroft, G., Ko, C.W.S., and Hull, M.A. *Oncogene* **26**, 3006-3019 (2007).
3. Babaev, V.R., Chew, J.D., Ding, L., et al. *Cell Metabolism* **8**, 492-501 (2008).
4. Young, R.N., Billot, X., Han, Y., et al. *Heterocycles* **64**, 437-445 (2004).
5. Clark, P., Rowland, S.E., Denis, D., et al. *J. Pharmacol. Exp. Ther.* **325**(2), 425-434 (2008).
6. Foudi, N., Kotelevets, L., Louedec, L., et al. *Br. J. Pharmacol.* **154**, 1631-1639 (2008).

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.

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