

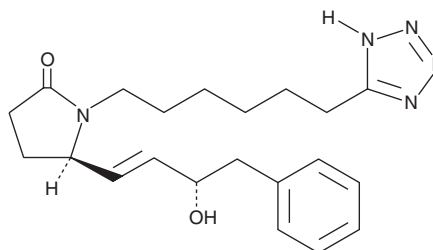
PRODUCT INFORMATION



CAY10598

Item No. 13281

CAS Registry No.: 346673-06-1
Formal Name: 5-[(3S)-3-hydroxy-4-phenyl-1-buten-1-yl]1-[6-(2H-tetrazol-5R-yl)hexyl]-2-pyrrolidinone
MF: C₂₁H₂₉N₅O₂
FW: 383.5
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

CAY10598 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol 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 CAY10598 in these solvents is approximately 12.5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of CAY10598 is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of CAY10598 in PBS, pH 7.2, is approximately 1.4 mg/ml. 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 CAY10598 is a very potent agonist of EP₄, binding with a K_i value of 1.2 nM.⁴ Moreover, it does not bind EP₁, EP₂, EP₃, or other prostanoid receptors, including DP, FP, IP, and TP.⁴ First generation EP₄ receptor-selective agonists have been shown to reduce inflammation, improve bone healing, provide cardio- and neuroprotection, and reduce renal dysfunction, suggesting some clinical applications for EP₄ agonists.⁵⁻⁹

References

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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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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