

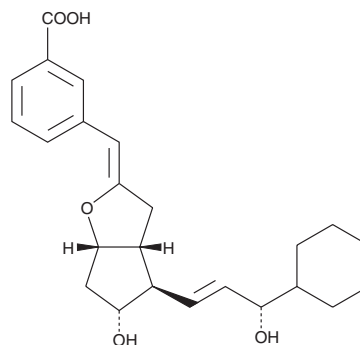
PRODUCT INFORMATION



Taprostene (free acid)

Item No. 10011348

CAS Registry No.: 108945-35-3
Formal Name: 3-[(Z)-[(3aR,4R,5R,6aS)-4-[(1E,3S)-3-cyclohexyl-3-hydroxy-1-propenyl]hexahydro-5-hydroxy-2H-cyclopenta[b]furan-2-ylidene)methyl]-benzoic acid
Synonyms: CG 4203, Rheocyflan
MF: C₂₄H₃₀O₅
FW: 398.5
Purity: ≥95%
UV/Vis.: λ_{max}: 233, 270 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

Taprostene (free acid) is supplied as a crystalline solid. A stock solution may be made by dissolving the taprostene (free acid) in water. The solubility of taprostene (free acid) in water is approximately 25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Taprostene is a stable prostacyclin (PGI₂) analog and agonist of the prostacyclin receptor, IP. It does not activate the PGE₂ receptor EP₄,¹ which, like IP, promotes vascular smooth muscle relaxation when stimulated. Taprostene has been used extensively to study the role of the IP receptor in tissue preparations and *in vivo*.¹⁻⁴ It has also been used in the screening and evaluation of potential IP antagonists.⁵

References

1. Jones, R.L. and Chan, K. Distinction between relaxations induced *via* prostanoid EP₄ and IP₁ receptors in pig and rabbit blood vessels. *Br. J. Pharmacol.* **134**, 313-324 (2001).
2. Tam, F.S.F., Chan, K., Bourreau, J.-P., *et al.* The mechanisms of enhancement and inhibition of field stimulation responses of guinea-pig vas deferens by prostacyclin analogues. *Br. J. Pharmacol.* **121**, 1413-1421 (1997).
3. Virgolini, I., Fitscha, P., Sinzinger, H., *et al.* Effects of taprostene, a stable prostacyclin analogue, on haemodynamics, platelet function and arachidonate metabolism in healthy volunteers. *Eur. J. Clin. Pharmacol.* **38**, 347-350 (1990).
4. Johnson, G., III, Furlan, L.E., Aoki, N., *et al.* Endothelium and myocardial protecting actions of taprostene, a stable prostacyclin analogue, after acute myocardial ischemia and reperfusion in cats. *Circ. Res.* **66**, 1362-1370 (1990).
5. Ayer, L.M., Wilson, S.M., Traves, S.L., *et al.* 4,5-dihydro-1H-imidazol-2-yl)-[4-(4-isopropoxy-benzyl)-phenyl]-amine (RO1138452) is a selective, pseudo-irreversible orthosteric antagonist at the prostacyclin (IP)-receptor expressed by human airway epithelial cells: IP-receptor-mediated inhibition of CXCL9 and CXCL10 release. *J. Pharmacol. Exp. Ther.* **324**(2), 815-826 (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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