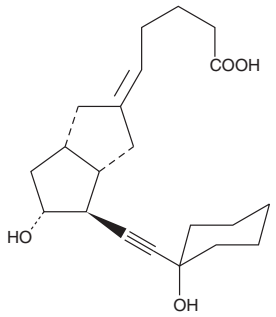
PRODUCT INFORMATION

13,14-dehydro-15-cyclohexyl Carbaprostacyclin

Item No. 18212

CAS Registry No.: 145375-81-1
Formal Name: [3aS-(2E,3aα,4α,5β,6aα)]-5-[hexahydro-5-hydroxy-4-[(1-hydroxycyclohexyl)ethynyl]-2(1H)-pentalenylidene]-pentanoic acid
MF: $C_{21}H_{30}O_4$
FW: 346.5
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

13,14-dehydro-15-cyclohexyl Carbaprostacyclin 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 13,14-dehydro-15-cyclohexyl carbaprostacyclin in these solvents is approximately 5 and 10 mg/ml, respectively.

13,14-dehydro-15-cyclohexyl Carbaprostacyclin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 13,14-dehydro-15-cyclohexyl carbaprostacyclin should be diluted with the aqueous buffer of choice. The solubility of 13,14-dehydro-15-cyclohexyl carbaprostacyclin in PBS (pH 7.2) is approximately 80 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

13,14-dehydro-15-cyclohexyl Carbaprostacyclin is a chemically stable analog of PGI_2. It inhibits the ADP-induced aggregation of human platelets with an ED_{50} of about 40 nM in PRP and 77 nM in washed platelets, which is comparable to the potency of carbaprostacyclin.[1,2]

References

1. Kanger, T., Lopp, M., Müraus, A., *et al.* Synthesis of a novel, optically active 15-nonstereogenic carbaprostacyclin. *Synthesis* **10**, 925-927 (1992).
2. Kobzar, G., Shelkovnikov, S., Mardla, V., *et al.* A 15-nonstereogenic carbocyclic analogue of prostacyclin: Effects on human platelets and uterine artery. *J. Lipid Mediat. Cell Signal.* **10(3)**, 2443-2449 (1994).

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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