

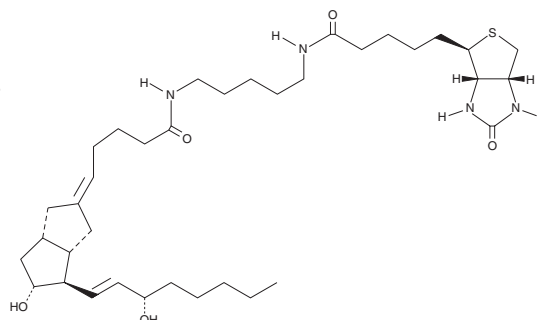
# PRODUCT INFORMATION



## Carbaprostacyclin-biotin

Item No. 18213

**Formal Name:** N-6,9 $\alpha$ -methylene-11 $\alpha$ ,15S-dihydroxy-prosta-5E,13E-dien-1-oyl-N-biotinoyl-1,5-diaminopentane  
**Synonyms:** Carbacyclin-biotin, cPGL-biotin  
**MF:** C<sub>36</sub>H<sub>60</sub>N<sub>4</sub>O<sub>5</sub>S  
**FW:** 661.0  
**Purity:**  $\geq 95\%$   
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:**  $\geq 1$  year



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

### Laboratory Procedures

Carbaprostacyclin-biotin 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 carbaprostacyclin-biotin in these solvents is approximately 10 mg/ml.

Carbaprostacyclin-biotin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of carbaprostacyclin-biotin should be diluted with the aqueous buffer of choice. Carbaprostacyclin-biotin has a solubility of 0.1 mg/ml in a 1:10 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Carbaprostacyclin is a structural analog of prostacyclin (PGI<sub>2</sub>) with about 1/10 the receptor binding affinity of prostacyclin.<sup>1</sup> Carbaprostacyclin is a relatively indiscriminant ligand for prostaglandin receptors, binding to all the recombinant human PG receptors, except the TP receptor, with an affinity which is a significant fraction of the natural ligand.<sup>2</sup> Carbaprostacyclin-biotin is therefore a useful affinity ligand for the binding and purification of a number of different receptors subtypes.

### References

1. Schrör, K., Darius, H., Matzky, R., *et al.* The antiplatelet and cardiovascular actions of a new carbacyclin derivative (ZK36374) — equipotent to PGI<sub>2</sub> in vitro. *Naunyn Schmiedebergs Arch. Pharmacol.* **316**(3), 252-255 (1981).
2. Abramovitz, M., Adam, M., Boie, Y., *et al.* The utilization of recombinant prostanoid receptors to determine the affinities and selectivities of prostaglandins and related analogs. *Biochim. Biophys. Acta* **1483**(2), 285-293 (2000).

#### 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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