

# PRODUCT INFORMATION



## CG 4305

Item No. 10012447

**Formal Name:** 3-[(E)-[(3aR,4S,5S,6aR)-4-[(1E,3R)-3-cyclohexyl-3-hydroxy-1-propen-1-yl]hexahydro-5-hydroxy-2(1H)-pentalenydene]methyl]-benzoic acid

**MF:** C<sub>25</sub>H<sub>32</sub>O<sub>4</sub>

**FW:** 396.5

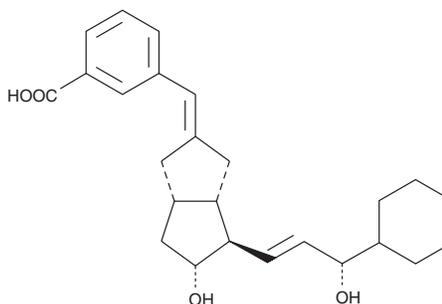
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 230, 257 nm

**Supplied as:** A solution in methyl acetate

**Storage:** -20°C

**Stability:** ≥2 years



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

## Laboratory Procedures

CG 4305 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of CG 4305 in ethanol is approximately 3 mg/ml and approximately 10 and 5 mg/ml in DMSO and DMF, respectively.

CG 4305 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of CG 4305 should be diluted with the aqueous buffer of choice. CG 4305 has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

Prostacyclin (PGI<sub>2</sub>) is a cyclooxygenase metabolite with antithrombotic properties found in vascular endothelial cells. The half-life is short both *in vivo* and *in vitro*, ranging from 30 seconds to a few minutes. CG 4305 is a stable carbacyclic analog of PGI<sub>2</sub> that inhibits ADP-induced platelet aggregation 25% at a concentration of 50 nM.<sup>1</sup> Doses of 10 mg/kg (oral) or 1 mg/kg (intraduodenal) have been shown to prevent rabbit carotid artery thrombosis.

## Reference

1. Maurin, N. Influence on platelet activity and red cell fluidity of epoprostenol and two stable prostacyclin analogues *in vitro*. *Arzneim. -Forsch. Drug Res.* **36(8)**, 1180-1183 (1986).

### 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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