# PRODUCT INFORMATION



## tetranor-PGDM lactone

Item No. 13564

Formal Name: 8-((4aR,5R,7aS)-2,6-

dioxooctahydrocyclopenta[b]pyran-5-yl)-6-

oxooctanoic acid

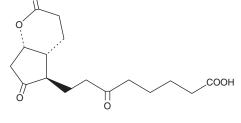
tetranor-Prostaglandin D Metabolite lactone Synonym:

MF:  $C_{16}H_{22}O_6$ 310.3 FW: **Purity:** ≥90%

Supplied as: A solution in methyl acetate

Storage: -80°C Stability: ≥6 months

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



## **Laboratory Procedures**

tetranor-PGDM lactone 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 purged with an inert gas can be used. The solubility of tetranor-PGDM lactone in these solvents is approximately 50 mg/ml.

tetranor-PGDM lactone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of tetranor-PGDM lactone should be diluted with the aqueous buffer of choice. The solubility of tetranor-PGDM lactone in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Prostaglandin D<sub>2</sub> (PGD<sub>2</sub>) plays a pharmacological role in allergic and asthmatic anaphylaxis, normal physiological sleep and lowering of body temperature, as well as inhibits platelet aggregation and relaxes vascular smooth muscle.  $^1$  tetranor-PGDM is an abundant urinary metabolite of PGD $_2$  that is detectable both in human and mouse and, as such, is used as a biomarker of PGD<sub>2</sub> biosynthesis.<sup>2</sup> tetranor-PGDM lactone is a closed form of tetranor-PGDM. The formation of tetranor-PGDM lactone in biological samples has not been evaluated.

#### References

- 1. Giles, H. and Leff, P. The biology and pharmacology of PGD<sub>2</sub>. Prostaglandins 35(2), 277-300 (1988).
- 2. Song, W.L., Wang, M., Ricciotti, E., et al. Tetranor PGDM, an abundant urinary metabolite reflects biosynthesis of prostaglandin D<sub>2</sub> in mice and humans. J. Biol. Chem. 283(2), 1179-1188 (2008).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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