

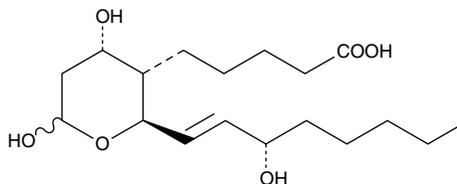
Product Information



2,3-dinor Thromboxane B₁

Item No. 10006330

CAS Registry No.: 196493-76-2
Formal Name: 9 α ,11,15S-trihydroxy-2,3-dinor-thromboxane-13E-en-1-oic acid
Synonym: 2,3-dinor TXB₁
MF: C₁₈H₃₂O₆
FW: 344.4
Purity: \geq 98%
Stability: \geq 1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that 2,3-dinor Thromboxane B₁ (2,3-dinor TXB₁) be stored as supplied at -20°C. It should be stable for at least one year.

2,3-dinor TXB₁ 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 2,3-dinor TXB₁ in these solvents is approximately 50 mg/ml in ethanol and DMF and approximately 20 mg/ml DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 2,3-dinor TXB₁ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 2,3-dinor TXB₁ in PBS (pH 7.2) is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

TXB₂ is released in substantial quantities from aggregating platelets and metabolized during circulation to 11-dehydro TXB₂ and 2,3-dinor TXB₂.¹ In rats and rabbits, 2,3-dinor TXB₁ has been identified as another urinary metabolite of TXB₂.^{2,3} However in human urine, only trace amounts of 2,3-dinor TXB₁ have been identified.² In rats, 2,3-dinor TXB₁ is excreted at a much higher rate than 2,3-dinor TXB₂ (19.2 \pm 4.9 ng/24 hr and 1.6 \pm 0.3 ng/24 hr, respectively).² Therefore, urinary 2,3-dinor TXB₁ is a suitable marker of thromboxane biosynthesis in rats.

References

1. Ciabattoni, G., Pugliese, F., Davi, G., *et al.* Fractional conversion of thromboxane B₂ to urinary 11-dehydrothromboxane B₂ in man. *Biochim. Biophys. Acta* **992**, 66-70 (1989).
2. Chiabrando, C., Corada, M., Bachi, A., *et al.* Urinary excretion of 2,3-dinor-thromboxane B₁, a major metabolite of thromboxane B₂ in the rat. *Prostaglandins* **47**, 409-422 (1994).
3. Westlund, P., Kumlin, M., Nordenström, A., *et al.* Circulating and urinary thromboxane B₂ metabolites in the rabbit: 11-dehydro-thromboxane B₂ as parameter of thromboxane production. *Prostaglandins* **31**(3), 413-443 (1986).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10006330

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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