

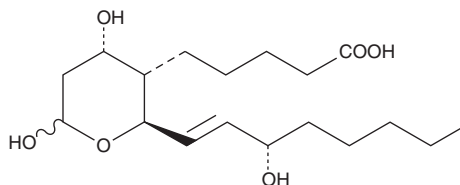
# Product Information



## 2,3-dinor Thromboxane B<sub>1</sub>

Catalog No. 10006330

<b>Formal Name:</b>	9 $\alpha$ ,11,15S-trihydroxy-2,3-dinor-thromboxane-13E-en-1-oic acid
<b>Synonym:</b>	2,3-dinor TXB <sub>1</sub>
<b>MF:</b>	C <sub>18</sub> H <sub>32</sub> O <sub>6</sub>
<b>FW:</b>	344.4
<b>Purity:</b>	≥98%
<b>Stability:</b>	≥1 year at -20°C
<b>Supplied as:</b>	A solution in methyl acetate



### Laboratory Procedures

For long term storage, we suggest that 2,3-dinor Thromboxane B<sub>1</sub> (2,3-dinor TXB<sub>1</sub>) be stored as supplied at -20°C. It should be stable for at least one year.

2,3-dinor TXB<sub>1</sub> 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 TXB<sub>1</sub> 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 TXB<sub>1</sub> 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 TXB<sub>1</sub> in PBS (pH 7.2) is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

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

### References

1. Ciabattini, G., Pugliese, F., Davi, G., *et al.* Fractional conversion of thromboxane B<sub>2</sub> to urinary 11-dehydrothromboxane B<sub>2</sub> 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 B<sub>1</sub>, a major metabolite of thromboxane B<sub>2</sub> in the rat. *Prostaglandins* **47**, 409-422 (1994).
3. Westlund, P., Kumlin, M., Nordenström, A., *et al.* Circulating and urinary thromboxane B<sub>2</sub> metabolites in the rabbit: 11-dehydro-thromboxane B<sub>2</sub> as parameter of thromboxane production. *Prostaglandins* **31**(3), 413-443 (1986).

### Related Products

Thromboxane B<sub>2</sub> - Cat. No. 19030 • 2,3-dinor Thromboxane B<sub>2</sub> - Cat. No. 19050 • Thromboxane B<sub>2</sub> EIA Kit - Cat. No. 519031 • 2,3-dinor Thromboxane B<sub>2</sub> EIA Kit - Cat. No. 519051 • 2,3-dinor Thromboxane B<sub>2</sub> EIA Kit (Solid Plate) - Cat. No. 519051.1 • 11-dehydro Thromboxane B<sub>2</sub> EIA Kit - Cat. No. 519501 • Thromboxane B<sub>1</sub> - Cat. No. 10006610

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

#### MATERIAL SAFETY DATA

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