

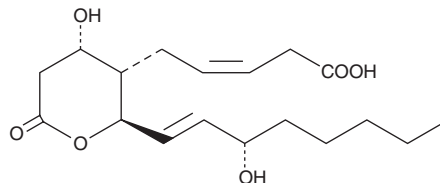
PRODUCT INFORMATION



11-dehydro-2,3-dinor Thromboxane B₂

Item No. 19510

CAS Registry No.: 79250-60-5
Formal Name: [2R-[2α(1E,3S*),3β(Z),4β]]-5-[tetrahydro-4-hydroxy-2-(3-hydroxy-1-octenyl)-6-oxo-2H-pyran-3-yl]-3-pentenoic acid
Synonym: 11-dehydro-2,3-dinor TXB₂
MF: C₁₈H₂₈O₆
FW: 340.4
Purity: ≥98%
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

11-dehydro-2,3-dinor Thromboxane B₂ (11-dehydro-2,3-dinor TXB₂) 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 11-dehydro-2,3-dinor TXB₂ in these solvents is approximately 100, 25, and 50 mg/ml, respectively.

11-dehydro-2,3-dinor TXB₂ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 11-dehydro-2,3-dinor TXB₂ should be diluted with the aqueous buffer of choice. The solubility of 11-dehydro-2,3-dinor TXB₂ in PBS (pH 7.2) is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

11-dehydro-2,3-dinor TXB₂ is a metabolite of the TXA₂ inactive metabolite TXB₂ (Item No. 19030).¹ It is formed from TXB₂ by cytosolic aldehyde dehydrogenase (ALDH) and β-oxidation.^{1,2} Levels of 11-dehydro-2,3-dinor TXB₂ are increased 5.2-fold in a surgery-induced rat model of tendon overuse.³

References

1. Roberts, L.J., II, Sweetman, B.J., and Oates, J.A. Metabolism of thromboxane B₂ in Man. Identification of the major urinary metabolite. *J. Biol. Chem.* **256(16)**, 8384-8393 (1981).
2. Westlund, P., Fylling, A.C., Cederlund, E., et al. 11-Hydroxythromboxane B₂ dehydrogenase is identical to cytosolic aldehyde dehydrogenase. *FEBS Lett.* **345(2-3)**, 99-103 (1994).
3. Markworth, J.F., Sugg, K.B., Sarver, D.C., et al. Local shifts in inflammatory and resolving lipid mediators in response to tendon overuse. *FASEB J.* **35(6)**, e21655 (2021).

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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