

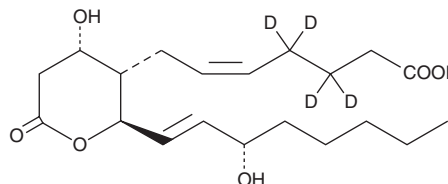
PRODUCT INFORMATION



11-dehydro Thromboxane B₂-d₄

Item No. 319500

CAS Registry No.: 1240398-15-5
Formal Name: 9 α ,15S-dihydroxy-11-oxothromba-5Z,13E-dien-1-oic-3,3,4,4-d₄ acid
Synonyms: 11-dehydro TXB₂-d₄, 11-keto Thromboxane B₂-d₄
MF: C₂₀H₂₈D₄O₆
FW: 372.5
Chemical Purity: ≥99%
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

11-dehydro Thromboxane B₂-d₄ (TXB₂-d₄) is intended for use as an internal standard for the quantification of 11-dehydro TXB₂ (Item No. 19500) by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

11-dehydro TXB₂-d₄ 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 TXB₂-d₄ in these solvents is approximately 100, 25, and 50 mg/ml, respectively. 11-dehydro TXB₂-d₄ is stable for at least six months in these solvents if stored at -20°C.

Description

TXB₂ is released in substantial quantities from aggregating platelets and metabolized during circulation to 11-dehydro TXB₂ and 2,3-dinor TXB₂.¹ 11-dehydro TXB₂ is one of the main plasma metabolites of TXB₂ and can be used as a marker for *in vivo* TXA₂ synthesis.¹⁻⁴ The mean plasma level of 11-dehydro TXB₂ human males is 0.9-4.3 pg/ml and the half-life is 45-60 minutes.²⁻⁴

References

1. Ciabattini, 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. Fitzgerald, G.A., Lawson, J., Blair, I.A., et al. Analysis of urinary metabolites of thromboxane and prostacyclin by negative-ion chemical-ionization gas chromatography/mass spectrometry. *Adv. Prostaglandin Thromboxane Leukotriene Res.* **15**, 87-90 (1985).
3. Takasaki, W., Nakagawa, A., Tanaka, Y., et al. Enzyme immunoassay of human plasma 11-dehydrothromboxane B₂. *Thromb. Res.* **63**, 331-341 (1991).
4. Catella, F., Healy, D., Lawson, J.A., et al. 11-dehydro Thromboxane B₂: A quantitative index of thromboxane A₂ formation in the human circulation. *Proc. Natl. Acad. Sci. USA* **83**, 5861-5865 (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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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