

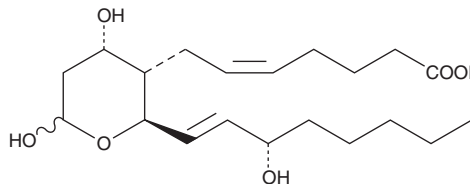
Product Information



Thromboxane B₂ Lipid Maps MS Standard

Catalog No. 10007237

CAS Registry No.: 54397-85-2
Formal Name: 9 α ,11,15S-trihydroxythromba-5Z,13E-dien-1-oic acid
Synonym: TXB₂
MF: C₂₀H₃₄O₆
FW: 370.5
Purity: \geq 99%
Stability: \geq 2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that thromboxane B₂ (TXB₂) be stored as supplied at -20°C. It should be stable for at least two years.

TXB₂ is supplied as a crystalline solid. A stock solution may be made by dissolving the TXB₂ in an organic solvent purged with an inert gas. TXB₂ is soluble in organic solvents such as methyl acetate or ethanol. The solubility of TXB₂ in these solvents is approximately 10 and 100 mg/ml, respectively.

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. Organic solvent-free aqueous solutions of TXB₂ can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of TXB₂ in PBS (pH 7.2) is approximately 100 μ g/ml. We do not recommend storing the aqueous solution for more than one day.

TXB₂ is a stable, biologically inert metabolite formed from the non-enzymatic hydrolysis of TXA₂, which has a half-life of about 30 seconds.¹ Urinary analysis of TXB₂ accurately reflects intrarenal TXA₂ synthesis,² while measurement of 11-dehydro and 2,3-dinor TX metabolites gives the best estimate of systemic TXA₂ secretion.^{3,4}

References

1. Needleman, P., Moncada, S., Bunting, S., *et al.* Identification of an enzyme in platelet microsomes which generates thromboxane A₂ from prostaglandin endoperoxides. *Nature* **261**, 558-560 (1976).
2. Patrono, C., Ciabattoni, G., Patrignani, P., *et al.* Evidence for a renal origin of urinary thromboxane B₂ in health and disease. *Adv. Prostaglandin Thromboxane Leukotriene Res.* **11**, 493-498 (1983).
3. Lawson, J.A., Patrono, C., Ciabattoni, G., *et al.* Long-lived enzymatic metabolites of thromboxane B₂ in the human circulation. *Anal. Biochem.* **155**, 198-205 (1986).
4. Patrono, C., Ciabattoni, G., Pugliese, F., *et al.* Estimated rate of thromboxane secretion into the circulation of normal humans. *J. Clin. Invest.* **77**, 590-594 (1986).

Related Products

Thromboxane B₂ - Cat. No. 19030 • 2,3-dinor Thromboxane B₂ - Cat. No. 19050 • 11-dehydro Thromboxane B₂ - Cat. No. 19500 • Thromboxane B₂-d₄ - Cat. No. 319030 • 11-dehydro Thromboxane B₂-d₄ - Cat. No. 319500 • Thromboxane B₂ Quant-PAK - Cat. No. 10006832

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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

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 Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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