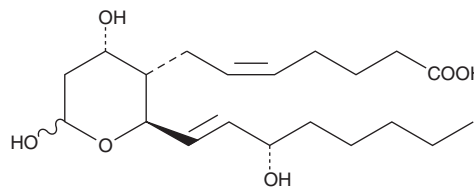


PRODUCT INFORMATION



Thromboxane B₂ Item No. 19030

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 98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Thromboxane B₂ (TXB₂) is supplied as a crystalline solid. A stock solution may be made by dissolving the TXB₂ in the solvent of choice, which should be purged with an inert gas. TXB₂ is soluble in organic solvents such as ethanol, methyl acetate, DMSO, and dimethyl formamide. The solubility of TXB₂ in these solvents is approximately 100, 10, 25, and 50 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 solid 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.

Description

Thromboxane B₂ (TXB₂) is a non-enzymatically derived, stable, inactive metabolite of TXA₂, which is highly unstable.¹⁻³ Serum levels of TXB₂ positively correlate with platelet COX-1 activation.^{4,5} Urinary levels of TXB₂ reflect intrarenal TXA₂ synthesis, while its metabolites, 11-dehydro TXB₂ (Item No. 19500) and 2,3-dinor TXB₂ (Item No. 19510), reflect systemic TXA₂ secretion.^{2,6,7}

References

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4. Arantes, F.B.B., Menezes, F.R., Franci, A., *et al.* Influence of direct thrombin inhibitor and low molecular weight heparin on platelet function in patients with coronary artery disease: A prospective interventional trial. *Adv. Ther.* **37**(1), 420-430 (2020).
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6. Lawson, J.A., Patrono, C., Ciabattoni, G., *et al.* Long-lived enzymatic metabolites of thromboxane B₂ in the human circulation. *Anal. Biochem.* **155**(1), 198-205 (1986).
7. Patrono, C., Ciabattoni, G., Patrignani, P., *et al.* Evidence for a renal origin of urinary thromboxane B₂ in health and disease. *Adv. Prostaglandin Thromboxane Leukot. Res.* **11**, 493-498 (1983).

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.

WARRANTY AND LIMITATION OF REMEDY

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