PRODUCT INFORMATION



2,3-dinor Thromboxane B_2

Item No. 19050

| CAS Registry No.: | 63250-09-9 | |
|------------------------|---|--|
| Formal Name: | 9a,11,15S-trihydroxy-2,3-dinor- | 0.1 |
| | thromba-5Z,13E-dien-1-oic acid | OH |
| Synonym: | 2,3-dinor TXB ₂ | |
| MF: | $C_{18}H_{30}O_{6}$ | COOH |
| FW: | 342.4 | |
| Purity: | ≥95% | |
| Supplied as: | A solution in methyl acetate | ŎН |
| Storage: | -20°C | |
| Stability: | ≥2 years | |
| Information represents | the product specifications. Batch specific of | analytical results are provided on each certificate of analysi |

Laboratory Procedures

2,3-dinor Thromboxane B_2 (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 2,3-dinor TXB₂ in these solvents is approximately 100, 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. If an organic solvent-free solution of 2,3-dinor TXB₂ 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 TXB₂ in PBS (pH 7.2) is approximately 100 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Thromboxane B₂ (TXB₂) is released in substantial quantities from aggregating platelets and metabolized during circulation to 11-dehydro TXB₂ and 2,3-dinor TXB₂.¹ 2,3-dinor TXB₂ is an abundant urinary metabolite of TXB₂ and can be used as a marker for *in vivo* TXA₂ synthesis.¹⁻³ In healthy male volunteers, the median excretion of 2,3-dinor TXB₂ is 10.3 ng/hour (138 pg/mg creatine).²

References

- 1. Ciabattoni, G., Pugliese, F., Davi, G., et al. Fractional conversion of thromboxane B₂ to urinary 11-dehydrothromboxane B₂ in man. Biochim. Biophys. Acta 992(1), 66-70 (1989).
- 2. Lawson, J.A., Brash, A.R., Doran, J., et al. Measurement of urinary 2,3-dinor-thromboxane B_2 and thromboxane B₂ using bonded-phase phenylboronic acid columns and capillary gas chromatographynegative-ion chemical ionization mass spectrometry. Anal. Biochem. 150(2), 463-470 (1985).
- 3. 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).

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

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/10/2023

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