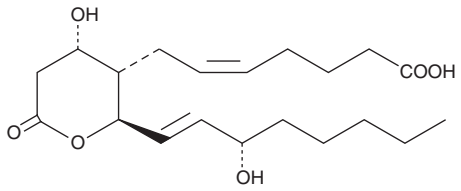
# PRODUCT INFORMATION

## 11-dehydro Thromboxane $B_2$

*Item No. 19500*

**CAS Registry No.:** 67910-12-7
**Synonyms:** 11-dehydro $TXB_2$, 11-keto $TXB_2$
**Formal Name:** 9α,15S-dihydroxy-11-oxothromba-5Z,13E-dien-1-oic acid
**MF:** $C_{20}H_{32}O_6$
**FW:** 368.5
**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 $TXB_2$ 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 $TXB_2$ in these solvents is approximately 100, 25, 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 11-dehydro $TXB_2$ is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 11-dehydro $TXB_2$ in PBS (pH 7.2) is approximately 100 µg/ml. Avoid adding 11-dehydro $TXB_2$ to basic solutions (pH 7.4), since base treatment will cause the hydrolysis of the lactone function of 11-dehydro $TXB_2$.We do not recommend storing the aqueous solution for more than one day.

### Description

$TXB_2$ is released in substantial quantities from aggregating platelets and metabolized during circulation to 11-dehydro $TXB_2$ and 2,3-dinor $TXB_2$.[1] 11-dehydro $TXB_2$ is one of the main plasma metabolites of $TXB_2$ and can be used as a marker for *in vivo* $TXA_2$ synthesis.[1-4] The mean plasma level of 11-dehydro $TXB_2$ in human males is 0.9-4.3 pg/ml and the half-life is 45-60 minutes.[2-4] Urinary concentrations of 11-dehydro $TXB_2$ are approximately 30-70 ng/mmol creatinine.[5,6]

### References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2. Fitzgerald, G.A., Lawson, J., Blair, I.A., *et al. Adv. Prostaglandin Thromboxane Leukotriene Res.* **15**, 87-90 (1985).
3. Takasaki, W., Nakagawa, A., Tanaka, Y., *et al. Thromb. Res.* **63**, 331-341 (1991).
4. Catella, F., Healy, D., Lawson, J.A., *et al. Proc. Natl. Acad. Sci. USA* **83**, 5861-5865 (1986).
5. Lellouche, F., Fradin, A., FitzGerald, G., *et al. Prostaglandins* **40**, 297-310 (1990).
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