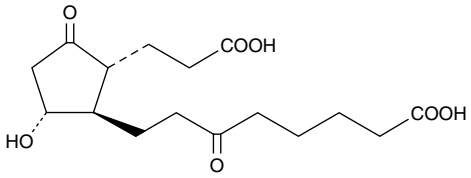
Product Information

tetranor-PGEM Lipid Maps MS Standard

Item No. 10007216

CAS Registry No.: 24769-56-0
Formal Name: 9,15-dioxo-11α-hydroxy-13,14-dihydro-2,3,4,5-tetranor-prostan-1,20-dioic acid
Synonym: tetranor-Prostaglandin E Metabolite
MF: $C_{16}H_{24}O_7$
FW: 328.4
Purity: ≥98%
Stability: ≥6 months at -80°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that tetranor-prostaglandin E metabolite (tetranor-PGEM) be stored as supplied at -80°C. It should be stable for at least six months.

tetranor-PGEM 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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of tetranor-PGEM in these solvents is approximately 50 mg/ml.

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 tetranor-PGEM is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of tetranor-PGEM in PBS (pH 7.2) is approximately 1 mg/ml. Store aqueous solutions of tetranor-PGEM on ice and use within 12 hours of preparation. We recommend making a fresh preparation each day.

tetranor-PGEM is the major urinary metabolite of PGE_1 and PGE_2, and is used as a urinary marker of PGE_2 biosynthesis.[1,2] About 15% of an infused dose of PGE_2 appears as this metabolite in the urine of humans. Normal healthy males excrete 7-40 µg of tetranor-PGEM over a 24-hour period.[1]

References

1. Hamberg, M. Inhibition of prostaglandin synthesis in man. *Biochem. Biophys. Res. Commun.* **49**, 720-726 (1972).
2. Honda, H., Fukawa, K., and Sawabe, T. Influence of adjuvant arthritis on main urinary metabolites of prostaglandin F and E rats. *Prostaglandins* **19**, 259-269 (1980).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10007216

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SAFETY DATA

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