SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

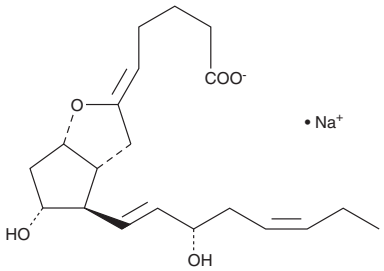
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Prostaglandin I_3 (sodium salt)

Item No. 18300

CAS Registry No.: 68324-96-9
Formal Name: 6,9α-epoxy-11α,15S-dihydroxy-prosta-5Z,13E,17Z-trien-1-oic acid, monosodium salt
Synonym: PGI_3
MF: $C_{20}H_{29}O_5 \bullet Na$
FW: 372.4
Purity: ≥99%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥6 months
Special Conditions: Hygroscopic



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

Laboratory Procedures

For long term storage, we suggest that prostaglandin I_3 (sodium salt) (PGI_3) be stored as supplied at -20°C. It should be stable for at least six months.

PGI_3 is supplied as a lyophilized powder soluble in water. It is unstable at neutral or acidic pH. On exposure to open air, the compound will absorb moisture and hydrolyze rapidly to 6-keto $PGF_{1\alpha}$. An aqueous stock solution of PGI_3 can be prepared by dissolving the crystalline solid directly in basic buffers (pH >10.2). The solubility of PGI_3 in PBS (pH >10.2) is approximately 10 mg/ml. Solutions of PGI_3 at physiologic pH and room temperature will have a half-life from 1 to 12 minutes depending on buffer concentration.[1,2]

PGI_3 is a prostacyclin analog. Δ^{17}-2,3-dinor-6-keto Prostaglandin $F_{1\alpha}$ is the major urinary metabolite of PGI_3.[3] Therefore, the measurement of Δ^{17}-2,3-dinor-6-keto Prostaglandin $F_{1\alpha}$ by GC/MS is used as a marker of the *in vivo* production of PGI_3.[3]

Description

PGI_3 is synthesized from EPA by COX and PGI synthase. PGI_3 has a short *in vivo* half-life and is hydrolyzed to Δ^{17}-6-keto $PGF_{1\alpha}$. The platelet and vascular activity of PGI_3 is equivalent to that of PGI_2.[3,4]

References

1. Stehle, R.G. Physical chemistry, stability, and handling of prostaglandins E_2, $F_{2\alpha}$, D_2 and I_2: A critical summary. *Methods Enzymol.* **86**, 436-459 (1982).
2. Moncada, S. Biology and therapeutic potential of prostacyclin. *Stroke* **14(2)**, 157-168 (1983).
3. Mann, N.J., Warrick, G.E., O'Dea, K., *et al.* The effect of linoleic, arachidonic, and eicosapentaenoic acid supplementation of prostacyclin production in rats. *Lipids* **29(3)**, 157-162 (1994).
4. Johnson, R.A., Lincoln, F.H., Nidy, E.G., *et al.* Synthesis and characterization of prostacyclin, 6-ketoprostaglandin $F_{1\alpha}$, prostaglandin I_1, and prostaglandin I_3. *J. Am. Chem. Soc.* **100(24)**, 7690-7704 (1978).

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