

PRODUCT INFORMATION



8-iso Misoprostol

Item No. 10047

Formal Name: 9-oxo-11 α ,16-dihydroxy-16-methyl-(8 β)-prost-13E-en-1-oic acid, methyl ester

MF: C₂₂H₃₈O₅

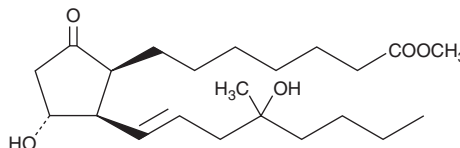
FW: 382.5

Purity: \geq 98%

Supplied as: A solution in ethanol

Storage: -20°C

Stability: \geq 2 years



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

Laboratory Procedures

8-iso Misoprostol is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol 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 8-iso misoprostol in these solvents is approximately 50 and 100 mg/ml, respectively.

8-iso Misoprostol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 8-iso misoprostol should be diluted with the aqueous buffer of choice. The solubility of 8-iso misoprostol in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Misoprostol is a widely sold analog of prostaglandin E₁ (PGE₁) which has potent but relatively non-selective agonist activity with respect to the prostanoid EP receptor subgroup.¹ Misoprostol has been used therapeutically for many years in humans for the treatment of gastric ulcer disease under the Searle tradename Cytotec.² 8-iso Misoprostol is one of several impurities which are possible in the production of bulk commercial preparations of misoprostol, and is somewhat difficult to distinguish from other impurities such as 11 β -misoprostol.³ The pharmacology and EP receptor binding affinity for 8-iso misoprostol has not been published.

References

1. Abramovitz, M., Adam, M., Boie, Y., *et al.* The utilization of recombinant prostanoid receptors to determine the affinities and selectivities of prostaglandins and related analogs. *Biochim. Biophys. Acta* **1483**(2), 285-293 (2000).
2. Collins, P.W. Misoprostol: Discovery, development, and clinical applications. *Med. Res. Rev.* **10**(2), 149-172 (1990).
3. Iyer, R.R. Personal Communication. (2002).

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.

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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