# **PRODUCT** INFORMATION



11-deoxy Prostaglandin E<sub>2</sub>

Item No. 14520

CAS Registry No.:	35536-53-9	
Formal Name:	15S-hydroxy-9-oxo-prosta-	
	5Z,13E-dien-1-oic acid	0 
Synonym:	11-deoxy PGE <sub>2</sub>	СООН
MF:	$C_{20}H_{32}O_4$	
FW:	336.5	
Purity:	≥99%	$\bullet \lor \lor \lor \lor$
Supplied as:	A crystalline solid	ÓН
Storage:	-20°C	
Stability:	≥4 years	
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Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

11-deoxy Prostaglandin  $E_2$  (11-deoxy PGE<sub>2</sub>) is supplied as a crystalline solid. A stock solution may be made by dissolving the 11-deoxy PGE<sub>2</sub> in the solvent of choice, which should be purged with an inert gas. 11-deoxy PGE<sub>2</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 11-deoxy  $PGE_2$  in these solvents is approximately 100 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. Organic solvent-free aqueous solutions of 11-deoxy PGE<sub>2</sub> can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 11-deoxy PGE<sub>2</sub> in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

11-deoxy  $PGE_2$  is a stable, synthetic analog of  $PGE_2$  (Item No. 14010). In contrast to  $PGE_2$  which has bronchodilation effects, 11-deoxy PGE<sub>2</sub> is a powerful bronchoconstrictor and contracts human respiratory tract smooth muscle with potencies ranging from 5 to 30 times higher than PGF<sub>2a</sub> (Item No. 16010).<sup>1</sup>

## Reference

1. Karim, S.M.M., Adaikan, P.G., and Kottegoda, S.R. Prostaglandins and human respiratory tract smooth muscle: Structure activity relationship. Adv. Prostaglandin Thromboxane Res. 7, 969-980 (1980).

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

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