

PRODUCT INFORMATION



Prostaglandin Bx

Item No. 11510

CAS Registry No.:	39306-29-1
Synonym:	PGBx
MF:	(PGB) _n n=3-5
FW:	1,000-1,500
Purity:	Mixture of oligomers
UV/Vis.:	λ_{max} : 236 nm
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years

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

Laboratory Procedures

Prostaglandin Bx (PGBx) 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 PGBx in these solvents is approximately 100 mg/ml.

PGBx is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of PGBx should be diluted with the aqueous buffer of choice. The solubility of PGBx in PBS (pH 7.2) is approximately 3.8 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Prostaglandin Bx (PGBx) is a mixture of oligomers of PGB₁ with a molecular weight of 1,000-1,500. It has antioxidant and free radical trapping activity that was first studied in isolated mitochondria.¹ PGBx has anti-inflammatory and cytoprotective activity which may be attributed to inhibition of the 14 kDa sPLA2.^{2,3} At a dose of 1 mg/kg, PGBx significantly reduces the incidence of ulcers in rats.²

References

1. Polis, B.D., Polis, E., and Kwong, S. Protection and reactivation of oxidative phosphorylation in mitochondria by a stable free-radical prostaglandin polymer (PGBx). *Proc. Natl. Acad. Sci. USA* **76(4)**, 1598-1602 (1979).
2. Kumashiro, R., Devlin, T.M., Kholoussy, A.M., et al. Prostaglandin Bx in the prevention of stress ulcers in rats. *Int. Surg.* **70**, 247-250 (1985).
3. Franson, R.C., Rosenthal, M.D., and Regelson, W. Mechanism(s) of cytoprotective and anti-inflammatory activity of PGB₁ oligomers: PGBx has potent anti-phospholipase A₂ and anti-oxidant activity. *Prostaglandins Leukot. Essent. Fatty Acids* **43(2)**, 63-70 (1991).

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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