

PRODUCT INFORMATION



Pancuronium (bromide hydrate)

Item No. 23778

Formal Name: 1,1'-[(2 β ,3 α ,5 α ,16 β ,17 β)-3,17-bis(acetyloxy)androstane-2,16-diyl]bis[1-methyl-piperidinium], dibromide, hydrate

Synonym: NSC 293162

MF: C₃₅H₆₀N₂O₄ • 2Br [XH₂O]

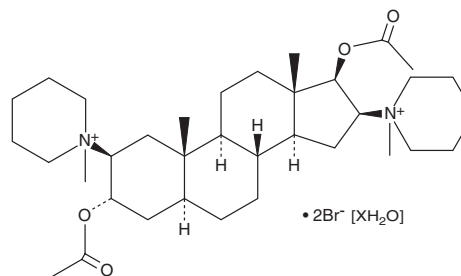
FW: 732.7

Purity: \geq 95%

Supplied as: A solid

Storage: -20°C

Stability: \geq 4 years



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

Laboratory Procedures

Pancuronium (bromide hydrate) is supplied as a solid. A stock solution may be made by dissolving the pancuronium (bromide hydrate) in the solvent of choice, which should be purged with an inert gas. Pancuronium (bromide hydrate) is slightly soluble in methanol, DMSO, and chloroform.

Description

Pancuronium is an aminosteroid antagonist of muscle-type nicotinic acetylcholine receptors (nAChRs) with an IC₅₀ value of 14.8 nM using patch clamp electrophysiology in BOSC23 cells expressing mouse nAChRs.¹ It acts as a non-depolarizing neuromuscular blocking agent.² Pancuronium enhances anesthesia induced by isoflurane (Item No. 23989), reducing immobilization with an ED₅₀ value of 1.62 μ g/kg.³

References

1. Liu, M. and Dilger, J.P. Site selectivity of competitive antagonists for the mouse adult muscle nicotinic acetylcholine receptor. *Mol. Pharmacol.* **75**(1), 166-173 (2009).
2. Buckett, W.R., Marjoribanks, C.E., Marwick, F.A., *et al.* The pharmacology of pancuronium bromide (Org.NA97), a new potent steroidal neuromuscular blocking agent. *Br. J. Pharmacol. Chemother.* **32**(3), 671-682 (1968).
3. Miyazaki, Y., Sunaga, H., Hobo, S., *et al.* Pancuronium enhances isoflurane anesthesia in rats via inhibition of cerebral nicotinic acetylcholine receptors. *J. Anesth.* **30**(4), 671-676 (2016).

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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