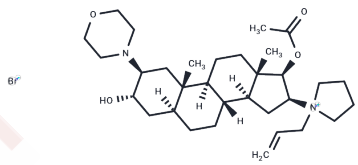
Data Sheet (Cat.No.T0156)

TargetMol

Rocuronium bromide

Chemical Properties



CAS No. : 119302-91-9

Formula: C32H53BrN2O4

Molecular Weight: 609.68

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Rocuronium bromide (ORG 9426) is a muscle relaxant or aminosteroid non-depolarizing neuromuscular blocker. During surgery or mechanical ventilation, it is used to facilitate endotracheal intubation and to provide skeletal muscle relaxation.
Targets(IC50)	AChR
In vitro	Rocuronium effectively reduces indirectly elicited twitch tensions in both normal diaphragms (IC50: 9.84 μM) and those pretreated, showing a significant decrease (P < . 01, n = 6) in a concentration-dependent manner [1]. It exhibits a similar ED95 for both children and adults, with a duration of action comparable to vecuronium but is shorter in children. Conventional doses of cholinesterase inhibitors can readily reverse its effects [2]. The onset time for maximum block is 1.7 (32) minutes, with the duration until 25% recovery of twitch height at 53 (19) minutes, and recovery from 25% to 75% of twitch height taking 20 (37) minutes [3].

Solubility Information

Solubility	DMSO: 113 mg/mL (185.34 mM),Sonication is recommended. H2O: 112 mg/mL (183.7 mM),Sonication is recommended. Ethanol: 113 mg/mL (185.34 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6402 mL	8.201 mL	16.402 mL
5 mM	0.328 mL	1.6402 mL	3.2804 mL
10 mM	0.164 mL	0.8201 mL	1.6402 mL
50 mM	0.0328 mL	0.164 mL	0.328 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Zan U, et al. Cytotechnology,2011, 63(3), 239-245.
Anzenbacherova E, et al. J Pharmacol Sci,2015, 127(2), 190-195.
Auer U, et al. Vet Ophthalmol,2011, 14(4), 244-247.
Tachibana M, et al. Pharmacology,2003, 68(2), 96-104.
Auer U, et al. Vet Anaesth Analg,2006, 33(4), 224-228.

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