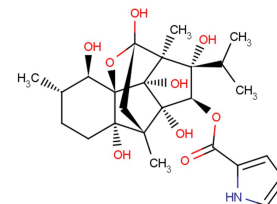


Ryanodine

Chemical Properties

CAS No.:	15662-33-6
Formula:	C ₂₅ H ₃₅ NO ₉
Molecular Weight:	493.55
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	Ryanodine is a cell permeant ryanodine receptor modulator. Ryanodine can either stimulate or inhibit Ryanodine-mediated Ca ²⁺ release depending on its concentrations. Poisonous diterpenoid found in <i>Ryania speciosa</i> .
Targets(IC ₅₀)	Ryanodine receptor: None
In vivo	At concentrations above 250 nM, ryanodine induces a slowly developing, dose dependent contracture which could not be blocked by 5 mM Co ²⁺ [1]. Ryanodine (100-5000 nM, 30-120 minutes) irreversibly depresses twitch and tetanic tension of both fast and slow muscle in a dose-related manner[1].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.026 mL	10.131 mL	20.261 mL
5 mM	0.405 mL	2.026 mL	4.052 mL
10 mM	0.203 mL	1.013 mL	2.026 mL
50 mM	0.041 mL	0.203 mL	0.405 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Meissner G, et al. Ryanodine activation and inhibition of the Ca²⁺ release channel of sarcoplasmic reticulum. J Biol Chem. 1986 May 15;261(14):6300-6.
2. Fryer MW, et al. The action of ryanodine on rat fast and slow intact skeletal muscles. J Physiol. 1989 Jul;414:399-413.

Inhibitors · Natural Compounds · Compound Libraries

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