

Product Name: Ryanodine

Catalog No.: 1329

Batch No.: 14

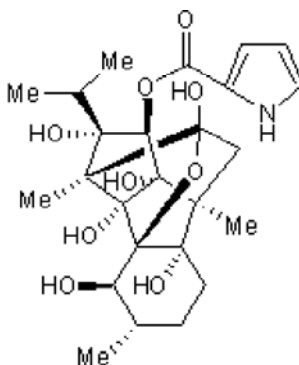
CAS Number: 15662-33-6

EC Number: 239-732-2

IUPAC Name: 1*H*-Pyrrole-2-carboxylic acid, (3*S*,4*R*,4*aR*,6*S*,7*S*,8*R*,8*aS*,8*bR*,9*S*,9*aS*)-dodecahydro-4,6,7,8*a*,8*b*,9*a*-hexahydroxy-3,6*a*,9-trimethyl-7-(1-methylethyl)-6,9-methanobenzo[1,2]pentaleno[1,6-*bc*]furan-8-yl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₅ H ₃₅ NO ₉
Batch Molecular Weight:	493.55
Physical Appearance:	White solid
Solubility:	ethanol to 10 mM DMSO to 25 mM
Storage:	Desiccate at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.8% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Potent inhibitor of Ca²⁺ release from sarcoplasmic reticulum (IC₅₀ values are 10 and 2.8 nM in skeletal and cardiac muscle respectively).

Physical and Chemical Properties:

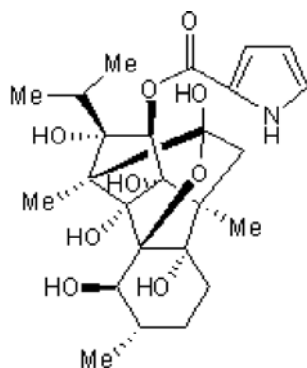
Batch Molecular Formula: C₂₅H₃₅NO₉

Batch Molecular Weight: 493.55

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Bianchi (1997) Conformation state of the ryanodine receptor and functional effects of ryanodine on skeletal muscle. *Biochem.Pharmacol.* **53** 909. PMID: 9174102.

Sutko et al (1997) The pharmacology of ryanodine and related compounds. *Pharmacol.Rev.* **49** 53. PMID: 9085309.

Sutko et al (1985) Ryanodine: a modifier of sarcoplasmic reticulum calcium release in striated muscle. *Fed.Proc.* **44** 2984. PMID: 2415406.

Storage: Desiccate at -20°C

Solubility & Usage Info:

ethanol to 10 mM

DMSO to 25 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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