

Ryanodine, Ca²⁺ release modulator ab120083

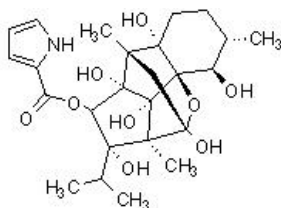
37 References **2 图像**

概述

产品名称	Ryanodine, Ca ²⁺ release modulator
描述	Ca ²⁺ release modulator
生物学描述	Alkaloid that binds with high affinity to ryanodine receptors to modulate intracellular Ca ²⁺ release. Has complex actions and may stimulate or inhibit Ca ²⁺ release, depending on the concentration used.

CAS编号 15662-33-6

化学结构



性能

化学名称	1 <i>H</i> -Pyrrole-2-carboxylic acid (3 <i>S</i> ,4 <i>R</i> ,4 <i>aR</i> ,6 <i>S</i> ,7 <i>S</i> ,8 <i>R</i> ,8 <i>aS</i> ,8 <i>bR</i> ,9 <i>S</i> ,9 <i>aS</i>)-dodecahydro-4,6,7,8 <i>a</i> ,8 <i>b</i> ,9 <i>a</i> -hexahydroxy-3,6 <i>a</i> ,9-trimethyl-7-(1-methylethyl)-6,9-methanobenzo[1,2]pentaleno[1,6- <i>bc</i>]furan-8-yl ester
分子量	493.55
分子式	C ₂₅ H ₃₅ NO ₉
PubChem识别号	5114
存放说明	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
溶解度概述	Soluble in ethanol to 10 mM
处理	<p>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.</p> <p>Toxic, refer to SDS for further information.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked</p>

[questions \(FAQ\) page](#) for more details.

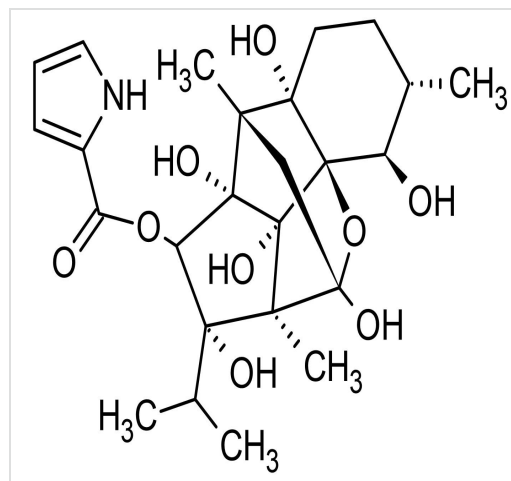
SMILES

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来源

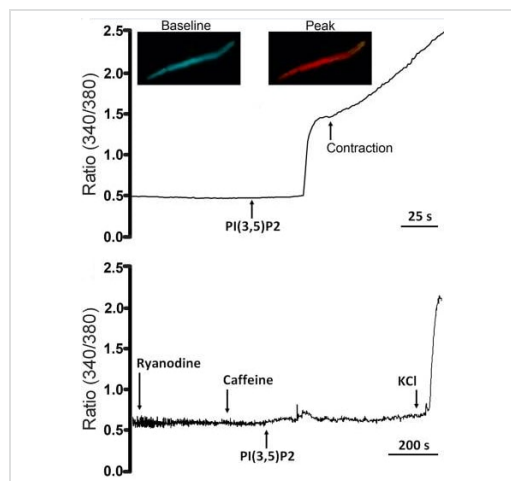
Ryania speciosa

图片



2D chemical structure image of ab120083, Ryanodine, Ca²⁺ release modulator

Chemical Structure - Ryanodine, Ca²⁺ release modulator (ab120083)



Ryanodine inhibits the elevation of intracellular Ca²⁺ by PI(3,5)P2 in primary cardiac myocytes. Top figure shows fura-2 ratiometric changes in intracellular Ca²⁺ in an isolated ventricular adult cardiac myocyte after treatment with PI(3,5)P2, ultimately resulting in contraction. Bottom figure shows that ryanodine inhibited the release of SR Ca²⁺ to both caffeine and PI(3,5)P2.

Functional Studies - Ryanodine, Ca²⁺ release modulator (ab120083)

Image from Touchberry CD et al., J Biol Chem. 2010;285(51):40312-21. Fig 4(A-B).; doi: 10.1074/jbc.M110.179689.

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