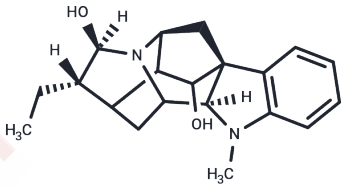
# Data Sheet (Cat.No.T4550)

TargetMol

## Ajmaline

### Chemical Properties



CAS No. : 4360-12-7

Formula: C20H26N2O2

Molecular Weight: 326.44

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | Ajmaline (Cardiorythmine) is a class Ia anti-arrhythmic compound that is widely used for the diagnosis of Brugada syndrome and the acute treatment of atrial or ventricular tachycardia. Ajmaline inhibits cardiac Kv1.5 and Kv4.3 channels at therapeutic concentrations. |
| Targets(IC50) | Sodium Channel |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 242.5 mg/mL (742.86 mM),Sonication is recommended.<br>Chloroform: Soluble,<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+90% Saline: < 10 mg/mL (30.63 mM),Lower concentrations may be soluble, but exact solubility limit is unknown.<br>10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (30.63 mM),Solution.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.0634 mL | 15.3168 mL | 30.6335 mL |
| 5 mM | 0.6127 mL | 3.0634 mL | 6.1267 mL |
| 10 mM | 0.3063 mL | 1.5317 mL | 3.0634 mL |
| 50 mM | 0.0613 mL | 0.3063 mL | 0.6127 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Fischer F, et al. Inhibition of cardiac Kv1.5 and Kv4.3 potassium channels by the class Ia anti-arrhythmic ajmaline: mode of action.[J]. Naunyn-Schmiedeberg's Archives of Pharmacology, 2013, 386(11):991-999.