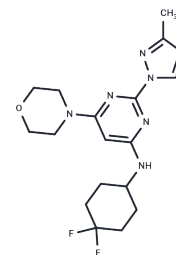


Rimtuzalcap

Chemical Properties

CAS No. :	2167246-24-2
Formula:	C ₁₈ H ₂₄ F ₂ N ₆ O
Molecular Weight:	378.42
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	Rimtuzalcap (CAD-1883) (CAD-1883), a pioneering selective positive allosteric modulator of small-conductance calcium-activated potassium channels (SK channels), is employed in the study of movement disorders such as spinocerebellar ataxia (SCA) and essential tremor (ET).
Targets(IC50)	Potassium Channel
In vitro	Rimtuzalcap (Compound 1), a small-molecule modulator of potassium ion channels, exhibits significant therapeutic promise for addressing a range of diseases. These diseases are marked either by the dysfunction of potassium ion channels or by other factors affecting these channels[1].
In vivo	Rimtuzalcap (CAD-1883) effectively decreases Purkinje cell firing rate by about 40%, aligning with its expected therapeutic action of enhancing SK channel activity through positive allosteric modulation. When applied in sequence, either 1 or 3 μM of CAD-1883 can partially reverse the augmented coefficient of variation in interspike intervals noted in cerebellar slices from 11-month-old spinocerebellar ataxia-2 58Q mice[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (660.64 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (13.21 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6426 mL	13.2128 mL	26.4257 mL
5 mM	0.5285 mL	2.6426 mL	5.2851 mL
10 mM	0.2643 mL	1.3213 mL	2.6426 mL
50 mM	0.0529 mL	0.2643 mL	0.5285 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

Crystalline forms of potassium channel modulators. WO2020086456A1.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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