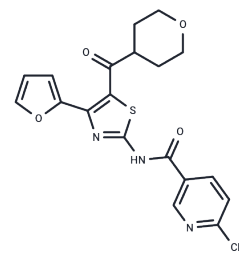


Sipagladenant

Chemical Properties

CAS No. :	858979-50-7
Formula:	C ₂₀ H ₁₉ N ₃ O ₄ S
Molecular Weight:	397.45
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	Sipagladenant (Compound I) is an orally active inverse agonist of the adenosine receptor A _{2A} [1], with potential applications in research on frontal lobe dysfunction [2].
Targets(IC50)	Others, Adenosine Receptor
In vivo	Sipagladenant administered orally at a dosage of 0.3 mg/kg significantly improves cognitive impairment associated with reduced dopamine function in the medial prefrontal cortex, evident through enhanced exploratory behavior towards novel objects (65.03% exploration time) in comparison to familiar ones (34.97%) [2]. Similarly, at a lower dosage of 0.1 mg/kg, Sipagladenant demonstrates an ability to enhance cognitive function, as shown by a notable increase in alternation behavior in ICR mice with cognitive impairment and/or movement disorder [2]. Moreover, this lower dosage also leads to significant improvements in gait parameters, including a larger maximum contact area and gait area of the left hindpaw compared to controls, alongside a tendency for increased contact and gait area in the right forepaw, highlighting its potential in ameliorating mobility-related symptoms [2]. These findings are based on studies conducted in medial prefrontal dopaminergic terminal-lesioned CD(SD) IGS male rats and ICR mice models, indicating Sipagladenant's broad therapeutic potential across different animal models of neurological impairment.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.516 mL	12.5802 mL	25.1604 mL
5 mM	0.5032 mL	2.516 mL	5.0321 mL
10 mM	0.2516 mL	1.258 mL	2.516 mL
50 mM	0.0503 mL	0.2516 mL	0.5032 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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