

GW 542573X

Chemical Properties

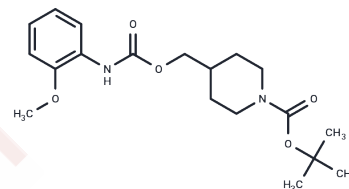
CAS No. : 660846-41-3

Formula: C₁₉H₂₈N₂O₅

Molecular Weight: 364.44

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	GW 542573X is a potent and selective small molecule Ca ²⁺ -activated K ⁺ 2 (SK2) channel activator. GW 542573X induces a leftward shift in the Ca ²⁺ response curve of hSK1 from an EC ₅₀ (Ca ²⁺) value of 410 nM to 240 nM, which can be used to study neurological disorders.
Targets(IC ₅₀)	Potassium Channel
In vitro	GW 542573X (100 μM, 200 μM; brain slices from normal rat) was found effective in dose-dependently increasing the interval between seizure-like events.[2]

Solubility Information

Solubility	DMSO: 90 mg/mL (246.95 mM), Sonication is recommended. Ethanol: < 36.44 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7439 mL	13.7197 mL	27.4394 mL
5 mM	0.5488 mL	2.7439 mL	5.4879 mL
10 mM	0.2744 mL	1.372 mL	2.7439 mL
50 mM	0.0549 mL	0.2744 mL	0.5488 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

Hougaard C, et al. Selective activation of the SK1 subtype of human small-conductance Ca²⁺-activated K⁺ channels by 4-(2-methoxyphenylcarbamoyloxymethyl)-piperidine-1-carboxylic acid tert-butyl ester (GW542573X) is dependent on serine 293 in the S5 segment. *Mol Pharmacol.* 2009;76(3):569-578.

Raza M L. Effects of small conductance calcium activated potassium channel agonists on seizure like events in in vitro slices and slice cultures. 2017.

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