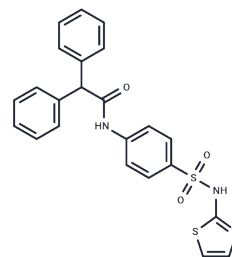


ICA-121431

Chemical Properties

CAS No. :	313254-51-2
Formula:	C ₂₃ H ₁₉ N ₃ O ₃ S ₂
Molecular Weight:	449.55
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	ICA-121431 (2,2-Diphenyl-N-[4-(thiazol-2-ylsulfamoyl)] is a nanomolar potent small molecule Nav1.7 channel inhibitor with IC ₅₀ of 19 nM for rat Nav1.7, with little or no activity against human Nav1.5 or Nav1.7 channels.
Targets(IC ₅₀)	Sodium Channel

Solubility Information

Solubility	DMSO: 110 mg/mL (244.69 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (22.24 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (22.24 mM), Solution. <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	2.2244 mL	11.1222 mL	22.2445 mL
5 mM	0.4449 mL	2.2244 mL	4.4489 mL
10 mM	0.2224 mL	1.1122 mL	2.2244 mL
50 mM	0.0445 mL	0.2224 mL	0.4449 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

Song G , Yang D , Wang Y , et al. Human GLP-1 receptor transmembrane domain structure in complex with allosteric modulators[J]. Nature, 2017.

Mccormack K , Santos S , Chapman M L , et al. Voltage sensor interaction site for selective small molecule inhibitors of voltage-gated sodium channels[J]. Proceedings of the National Academy of Sciences, 2013, 110(29):E2724-E2732.

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481