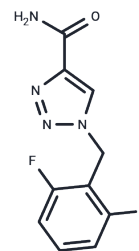


Rufinamide

Chemical Properties

CAS No. :	106308-44-5
Formula:	C ₁₀ H ₈ F ₂ N ₄ O
Molecular Weight:	238.19
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	Rufinamide (E 2080), a triazole derivative, is used as voltage-gated sodium channel blocker for the treatment of seizure disorders.
Targets(IC50)	Others,Sodium Channel
In vitro	Rufinamide effectively suppresses maximal electroshock (MES)-induced tonic convulsions in mice (ED ₅₀ = 23.9 mg/kg) and rats (ED ₅₀ = 6.1 mg/kg). Additionally, Rufinamide inhibits pentylenetetrazol-(ED ₅₀ =54.0), bicuculline-(ED ₅₀ =50.5), and picrotoxin (ED ₅₀ =76.3 mg/kg) provoked clonic seizures in mice. Furthermore, it prevents pentylenetetrazole-induced epileptic seizures in mice at an effective dose of 45.8 mg/kg (ED ₅₀).
In vivo	Rufinamide inhibits sodium-dependent action potentials in neurons, potentially exhibiting membrane stabilizing effects.

Solubility Information

Solubility	DMSO: 16.67 mg/mL (69.99 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1.5 mg/mL (6.3 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	4.1983 mL	20.9916 mL	41.9833 mL
5 mM	0.8397 mL	4.1983 mL	8.3967 mL
10 mM	0.4198 mL	2.0992 mL	4.1983 mL
50 mM	0.084 mL	0.4198 mL	0.8397 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

- Cheng-Hakimian A, et al. *Int J Clin Pract*,2006, 60(11), 1497-1501.
- Williams ET, et al. *Drug Metab Lett*,2011, 5(4), 280-289.
- Wright HM, et al. *J Vet Pharmacol Ther*,2012, 35(6), 529-533.
- Suter MR, et al. *Anesthesiology*,2013, 118(1), 160-172.
- White HS, et al. *Epilepsia*,2008, 49(7), 1213-1220.

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