

IWR-1

Chemical Properties

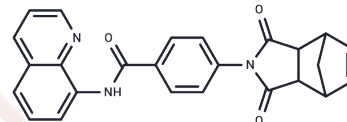
CAS No. : 1127442-82-3

Formula: C₂₅H₁₉N₃O₃

Molecular Weight: 409.44

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	IWR-1 (IWR-1-endo), a Wnt pathway inhibitor, stabilizes the Axin destruction complex (EC ₅₀ =0.2 μM).
Targets(IC ₅₀)	Wnt/beta-catenin
In vivo	In the Wnt pathway, IWR-1 interacts with Axin to exert a reversible inhibitory effect.

Solubility Information

Solubility	DMSO: 85.8 mg/mL (209.55 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: 4.1 mg/mL (10.01 mM), Suspension. <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	2.4424 mL	12.2118 mL	24.4236 mL
5 mM	0.4885 mL	2.4424 mL	4.8847 mL
10 mM	0.2442 mL	1.2212 mL	2.4424 mL
50 mM	0.0488 mL	0.2442 mL	0.4885 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

Lu J, et al. Bioorg Med Chem Lett, 2009, 19(14), 3825-3827.

Yan Z, Ruan B, Wang S, et al. RNA-binding Protein QKI Inhibits Osteogenic Differentiation Via Suppressing Wnt Pathway. Archives of Medical Research. 2023: 102853.

Xu Y L, Sun G M, Zhang J M, et al. Regulating the Wnt/ β -catenin Signaling Pathway Promotes Repigmentation in Vitiligo Using Fire Needle Therapy. Dermatologic Therapy. 2024, 2024.

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