

YLF-466D

Chemical Properties

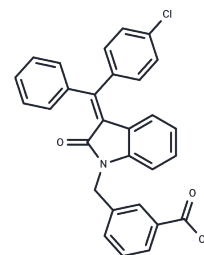
CAS No. : 1273323-67-3

Formula: C₂₉H₂₀ClNO₃

Molecular Weight: 465.93

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	YLF-466D (C24) is a novel AMPK activator that inhibits platelet aggregation.
Targets(IC50)	AMPK
In vitro	The study investigates the impact of YLF-466D on platelet AMPK activation and its potential to inhibit platelet aggregation. Activation of platelet AMPK by YLF-466D is confirmed through phosphorylation at Thr172, leading to the suppression of platelet aggregation triggered by thrombin, ADP, and collagen. This demonstrates that YLF-466D's anti-aggregatory effect is broad and not specific to the type of platelet agonist. The effects of YLF-466D on AMPK activation and aggregation inhibition are concentration-dependent, showing maximal effectiveness at 150 μ M. The IC50 values for inhibiting aggregation induced by thrombin, ADP, and collagen are approximately 84, 55, and 87 μ M, respectively.

Solubility Information

Solubility	DMSO: 90 mg/mL (193.16 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: 3.3 mg/mL (7.08 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	2.1462 mL	10.7312 mL	21.4625 mL
5 mM	0.4292 mL	2.1462 mL	4.2925 mL
10 mM	0.2146 mL	1.0731 mL	2.1462 mL
50 mM	0.0429 mL	0.2146 mL	0.4292 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

Liu Y, et al. Antiplatelet effect of a newly developed AMP-activated protein kinase activator YLF-466D. Eur J Pharmacol. 2015 Aug 5;760:81-7.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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