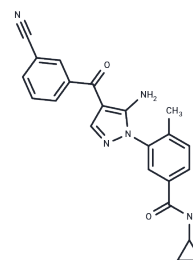


Acumapimod

Chemical Properties

CAS No. :	836683-15-9
Formula:	C ₂₂ H ₁₉ N ₅ O ₂
Molecular Weight:	385.42
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	Acumapimod (BCT-197) is an orally active inhibitor of p38 α MAPK (IC ₅₀ <1 μ M).
Targets(IC ₅₀)	Autophagy,p38 MAPK
In vivo	Acumapimod increases survival and reduces the number of macrophages in bronchoalveolar lavage fluid (BALF) in a mouse model of infection with influenza H1N1 A/PR/8/34 when administered at a dose of 6 mg/kg[1]
Animal Research	In vivo, female BALB/c mice were infected intranasally with 150 pfu of influenza H1N1 A/Puerto Rico/8/34 and treated with Acumapimod(BCT197) (a closely related p38 MAPK inhibitor with an IC ₅₀ value of<1 μ M, currently in clinical testing), dexamethasone or oseltamivir (Tamiflu) starting 24h post infection. Body weight, bronchoalveolar lavage cells, cytokines, total protein and lactate dehydrogenase as well as serum cytokines were measured; a subset of animals was evaluated histopathologically[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (129.73 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: 2 mg/mL (5.19 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	2.5946 mL	12.9729 mL	25.9457 mL
5 mM	0.5189 mL	2.5946 mL	5.1891 mL
10 mM	0.2595 mL	1.2973 mL	2.5946 mL
50 mM	0.0519 mL	0.2595 mL	0.5189 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

Growcott E J , Bamba D , Galarneau J . R , et al. The effect of P38 MAP kinase inhibition in a mouse model of influenza[J]. *Journal of Medical Microbiology*, 2018, 67(3).

De Buck S , Hueber W , Vitaliti A , et al. Population PK-PD Model for Tolerance Evaluation to the p38 MAP Kinase Inhibitor BCT197[J]. *CPT: Pharmacometrics & Systems Pharmacology*, 2015, 4(12):691-700.

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