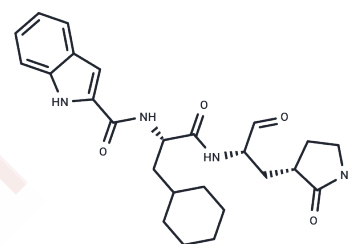


Bofutrelvir

Chemical Properties

CAS No. :	2103278-86-8
Formula:	C ₂₅ H ₃₂ N ₄ O ₄
Molecular Weight:	452.55
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	Bofutrelvir (FB2001) is a SARS-CoV-2 3CL protease inhibitor with antiviral activity for the study of novel coronavirus pneumonia (COVID-19) infections.
Targets(IC50)	SARS-CoV
In vitro	MPro Inhibitor 11a (24 hours) exhibits in vitro inhibitory activity against SARS-CoV-2 and its variants when combined with remdesivir treatment[1].
In vivo	In K18-hACE2 mice infected with the SARS-CoV-2 Delta variant, MPro Inhibitor 11a (100 and 200 mg/kg; intraperitoneal injection; administered once daily at 100 and 200 mg/kg on day 0 and twice daily on days 1, 2, and 3 for 4 consecutive days) demonstrated a dose-dependent efficacy against lung viral titers, effectively reducing lung viral loads[2].

Solubility Information

Solubility	Ethanol: 30 mg/mL (66.29 mM),Sonication is recommended. DMF: 30 mg/mL (66.29 mM),Sonication is recommended. DMSO: 145 mg/mL (320.41 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 (7.29 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	2.2097 mL	11.0485 mL	22.097 mL
5 mM	0.4419 mL	2.2097 mL	4.4194 mL
10 mM	0.221 mL	1.1049 mL	2.2097 mL
50 mM	0.0442 mL	0.221 mL	0.4419 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

Ullrich S, et al. The SARS-CoV-2 main protease as drug target. *Bioorg Med Chem Lett*. 2020 Sep 1;30(17):127377.
Shang W, et al. In vitro and in vivo evaluation of the main protease inhibitor FB2001 against SARS-CoV-Antiviral Res. 2022 Dec;208:105450.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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