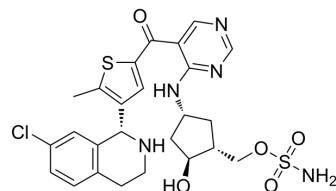


Subasumstat

Cat. No.:	HY-111789		
CAS No.:	1858276-04-6		
Molecular Formula:	C ₂₅ H ₂₈ ClN ₅ O ₅ S ₂		
Molecular Weight:	578.1		
Target:	E1/E2/E3 Enzyme		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 16.67 mg/mL (28.84 mM; ultrasonic and warming and heat to 80°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.7298 mL	8.6490 mL	17.2980 mL
	5 mM	0.3460 mL	1.7298 mL	3.4596 mL
	10 mM	0.1730 mL	0.8649 mL	1.7298 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (4.32 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.5 mg/mL (4.32 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.32 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Subasumstat (TAK-981) is a first in class and selective inhibitor of the SUMOylation enzymatic cascade, with potential immune-activating and antineoplastic activities^{[1][2]}.

IC₅₀ & Target

SUMOylation^[1].

In Vitro

Subasumstat (TAK-981) is able to increase the production of type 1 IFN, thereby increasing type 1 IFN-mediated signaling, activating innate effector cells and enhancing the antitumor innate immune responses^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

A single sub-cutaneous injection of Subasumstat (TAK-981) in naive Balb/c mice at the brachial lymph nodes induces activation of DCs^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Microbiol. 2022 Nov 14.
- J Clin Invest. 2022 May 2;132(9):e152383.
- EMBO Mol Med. 2023 Jul 24;e16431.
- Cell Death Dis. 2023 Feb 21;14(2):147.
- J Biol Chem. 2023 Sep 22;105280.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Sumoylation inhibitor TAK-981.

[2]. TAK-981.

Caution: Product has not been fully validated for medical applications. For research use only.

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