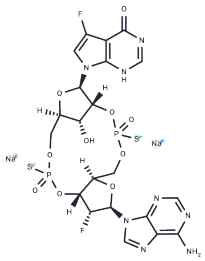
Data Sheet (Cat.No.T72482)

TargetMol

Dazostinag disodium

Chemical Properties



CAS No. : 2553413-93-5

Formula: C21H20F2N8Na2O10P2S2

Molecular Weight: 754.48

Storage: Store at low temperature,Keep away from moisture
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	Dazostinag disodium (TAK-676) is a synthetic novel interferon gene (STING) agonist that triggers STING signaling pathway activation and type I interferon activation. Dazostinag disodium (TAK-676) is also a highly effective immune system modulator with complete resolution and lasting memory of T cell immunity and the ability to promote lasting interferon-dependent anti-tumor immune responses.
Targets(IC50)	STING
In vitro	**METHODS**: The ability of TAK-676 to activate the STING pathway was evaluated in human THP1-Dual and mouse CT26 cells treated with dazostinag disodium (TAK-676) (1.1, 3.3, 10 μM, 2 hours). **RESULTS** Expression of pSTING (S366), pTBK1 (S172), and pIRF3 (S396) was dose-dependently induced in both mouse and human cell lines. [1]
In vivo	**METHODS**: Mice were injected subcutaneously into the right flank with CT26, WT tumor cells, A20 tumor cells, or B16F10 tumor cells, and Dazostinag disodium (TAK-676) (0.3, 1.0, 2.0 mg/kg, intravenously, once every three days, 3 times), and the effects on tumor growth were evaluated by measuring growth rate inhibition (GRI) and tumor regression. **RESULTS** When Dazostinag disodium (TAK-676) was administered at a dose of 1 mg/kg, BALB/c mice bearing A20 syngeneic tumors showed significant antitumor activity compared to vehicle treatment (GRI 72%, P < 0.001); similar to the A20 tumor model, CT26 tumor-bearing animals treated with 1 mg/kg of Dazostinag disodium (TAK-676) also showed tumor control over vehicle-treated animals; when the dose of Dazostinag disodium (TAK-676) was increased from 1.0 to 2.0 mg/kg, the antitumor activity was significantly increased in both the A20 (GRI=91%, P < 0.001) and CT26 (GRI=132%, P < 0.001) models. [1]

Solubility Information

Solubility	DMSO: 250 mg/mL (331.35 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3254 mL	6.6271 mL	13.2542 mL
5 mM	0.2651 mL	1.3254 mL	2.6508 mL
10 mM	0.1325 mL	0.6627 mL	1.3254 mL
50 mM	0.0265 mL	0.1325 mL	0.2651 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

Carideo Cunniff E, et al. TAK-676: A Novel Stimulator of Interferon Genes (STING) Agonist Promoting Durable IFN-dependent Antitumor Immunity in Preclinical Studies. Cancer Res Commun. 2022 Jun 23;2(6):489-502.