

CAY10748

Chemical Properties

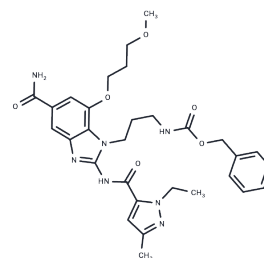
CAS No. : 2412902-55-5

Formula: C30H37N7O6

Molecular Weight: 591.66

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	CAY10748 is an agonist of stimulator of interferon genes (STING; IC ₅₀ = 0.3794 μ M in a competition binding assay). It activates STING in STING-expressing, but not STING knockout, THP-1 cells (EC ₅₀ s = 0.287 and >100 μ M, respectively, in a reporter assay). It induces phosphorylation of STING at the serine in position 366, as well as phosphorylation of TBK1 and IFN regulatory factor 3 (IRF3), indicating activation of the STING-TBK1-IRF3 signaling pathway. CAY10748 increases the secretion of IFN- β and the levels of chemokine (C-X-C motif) ligand 10 (CXCL10), and IL-6 in peripheral blood mononuclear cells (PBMCs) when used at a concentration of 10 μ M. It also reduces tumor growth in a CT26 murine colon cancer model when administered at a dose of 0.15, but not 1.5, mg/kg.
-------------	---

Solubility Information

Solubility	DMF: 10 mg/mL DMF:PBS (pH 7.2) (1:2): 0.3 mg/mL DMSO: 5 mg/mL Ethanol: 0.3 mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6902 mL	8.4508 mL	16.9016 mL
5 mM	0.338 mL	1.6902 mL	3.3803 mL
10 mM	0.169 mL	0.8451 mL	1.6902 mL
50 mM	0.0338 mL	0.169 mL	0.338 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.

Reference

Xi, Q., Wang, M., Jia, W., et al. Design, synthesis, and biological evaluation of amidobenzimidazole derivatives as stimulator of interferon genes (STING) receptor agonists. *J. Med. Chem.* 63(1)260-282(2019)