

CAY10748

## Chemical Properties

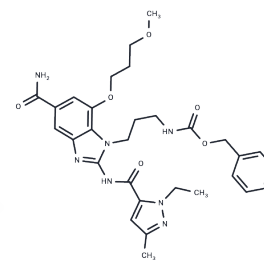
CAS No. : 2412902-55-5

Formula: C30H37N7O6

Molecular Weight: 591.66

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	CAY10748 is an agonist of stimulator of interferon genes (STING; IC50= 0.3794 $\mu$ M in a competition binding assay). It activates STING in STING-expressing, but not STING knockout, THP-1 cells (EC50s = 0.287 and >100 $\mu$ 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- $\beta$ 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 $\mu$ 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.
Targets(IC50)	Others

## Solubility Information

Solubility	DMF: 10 mg/mL (16.9 mM), Sonication is recommended. DMF:PBS (pH 7.2) (1:2): 0.3 mg/mL (0.51 mM), Sonication is recommended. DMSO: 5 mg/mL (8.45 mM), Sonication is recommended. Ethanol: 0.3 mg/mL (0.51 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	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

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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

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)

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