

BAY 2416964

Chemical Properties

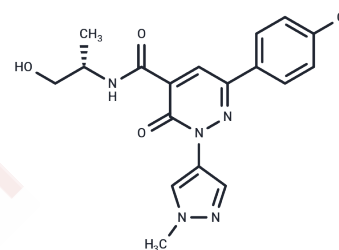
CAS No. : 2242464-44-2

Formula: C₁₈H₁₈ClN₅O₃

Molecular Weight: 387.82

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	BAY 2416964 is a small molecule inhibitor that selectively targets aromatic receptor (AhR) with an IC ₅₀ of 341 nM and is commonly used in cancer immunotherapy research.
Targets(IC ₅₀)	Aryl Hydrocarbon Receptor
In vitro	METHODS: Human monocytes were treated with BAY 2416964 (1 nM-10 μM), kynurenic acid (200 μM), and LPS (10 ng/mL) for 24 h, and TNF-α levels were measured by ELISA. RESULTS: kynurenic acid-induced AhR activation inhibited TNF-α production in LPS-stimulated monocytes, and BAY 2416964 dose-dependently rescued this AhR-mediated inhibition. [1]
In vivo	METHODS: To assay antitumor activity in vivo, BAY 2416964 (30 mg/kg) was administered orally to NSG mice bearing B16F10-OVA tumors once daily for seven days. RESULTS: BAY 2416964 inhibited tumor growth. BAY 2416964 increased the frequency of immunostimulatory tumor-infiltrating CD8 ⁺ T cells and N cells, and decreased the frequency of immunosuppressive GR1-positive myeloid cells and CD206 ⁺ M2 macrophages. [1]

Solubility Information

Solubility	DMSO: 64.4 mg/mL (166.06 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5785 mL	12.8926 mL	25.7852 mL
5 mM	0.5157 mL	2.5785 mL	5.157 mL
10 mM	0.2579 mL	1.2893 mL	2.5785 mL
50 mM	0.0516 mL	0.2579 mL	0.5157 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

Kober C, et al. Targeting the aryl hydrocarbon receptor (AhR) with BAY 2416964: a selective small molecule inhibitor for cancer immunotherapy. J Immunother Cancer. 2023 Nov; 11(11):e007495.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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