

PKM2-IN-6

Chemical Properties

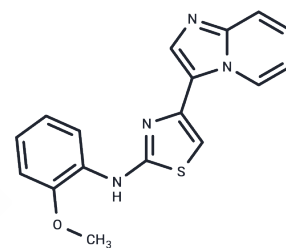
CAS No. : 771467-00-6

Formula: C17H14N4OS

Molecular Weight: 322.38

Storage: Keep away from moisture, Store under nitrogen
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	PKM2-IN-6 (compound 7d) is an orally active PKM2 inhibitor (IC ₅₀ =23 nM) capable of inducing apoptosis and G2 cell cycle arrest. It reduces PKM1 and PKM2 expression at the mRNA level, exhibits antitumour activity, and is suitable for investigating triple-negative breast cancer (TNBC).
Targets(IC ₅₀)	Apoptosis,PKM
In vitro	PKM2-IN-6 (compound 7d) (0-100 μM) exhibited cytotoxicity against COLO-205, A-549, and MCF-7 cells after 48 hours of treatment, with IC ₅₀ values of 18.33 μM, 47.00 μM, and 19.80 μM, respectively [1]. PKM2-IN-6 (14.38 μM) induced apoptosis and caused cell cycle arrest at the G2 phase after 48 hours of treatment [1]. PKM2-IN-6 (14.38 μM) downregulated the expression of PKM1 and PKM2 at the mRNA level after 24 hours of treatment [1].
In vivo	PKM2-IN-6 (25 and 50 mg/kg, orally administered once daily for three weeks) significantly reduced tumor volume and weight in female CD-1 nude mice (6-8 weeks old) inoculated with 4T1-Red-FLuc cells [1].

Solubility Information

Solubility	DMSO: 100 mg/mL (310.19 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	3.1019 mL	15.5096 mL	31.0193 mL
5 mM	0.6204 mL	3.1019 mL	6.2039 mL
10 mM	0.3102 mL	1.551 mL	3.1019 mL
50 mM	0.062 mL	0.3102 mL	0.6204 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

Das R, et al. Mechanistic Investigation of Thiazole-Based Pyruvate Kinase M2 Inhibitor Causing Tumor Regression in Triple-Negative Breast Cancer. J Med Chem. 2024 Mar 14;67(5):3339-3357.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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