

SD-1029

Chemical Properties

CAS No. : 118372-34-2

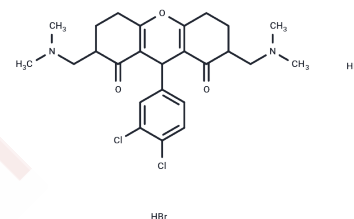
Formula: C₂₅H₃₂Br₂Cl₂N₂O₃

Molecular Weight: 639.25

Store at low temperature

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	SD-1029 is a JAK2 inhibitor and a novel Stat3 activation inhibitor that inhibits Stat3 phosphorylation and JAK-STAT signaling.
Targets(IC50)	STAT,JAK
In vitro	SD-1029 inhibits EGFP-Stat3 nuclear translocation in BHK-21 and U-2OS cells and suppresses p-Stat3 levels in human breast and ovarian cancer cell lines including cell growth and induces apoptosis in OVCAR8TR ovarian cancer cells. [1] SD-1029 inhibits JAK2 phosphorylation and the phosphorylation of STAT1 and STAT3. SD-1029 strongly inhibits Tyk2 phosphorylation, implicating both JAK2 and Tyk2 as upstream requirements for IL-23-induced IL-23R expression. [2]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5643 mL	7.8217 mL	15.6433 mL
5 mM	0.3129 mL	1.5643 mL	3.1287 mL
10 mM	0.1564 mL	0.7822 mL	1.5643 mL
50 mM	0.0313 mL	0.1564 mL	0.3129 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

Duan Z, et al. SD-1029 inhibits signal transducer and activator of transcription 3 nuclear translocation. Clin Cancer Res. 2006 Nov 15;12(22):6844-52.

Che Mat NF, et al. Interleukin-23-induced interleukin-23 receptor subunit expression is mediated by the Janus kinase/signal transducer and activation of transcription pathway in human CD4T cells. J Interferon Cytokine Res. 2011 Apr;31(4):363-71.

Liu Y, Liu A, Xu Z, Yu W, Wang H, Li C, Lin J. XZH-5 inhibits STAT3 phosphorylation and causes apoptosis in human hepatocellular carcinoma cells. Apoptosis. 2011 May;16(5):502-10. doi: 10.1007/s10495-011-0578-0. PubMed PMID: 21311975.

Che Mat NF, Zhang X, Guzzo C, Gee K. Interleukin-23-induced interleukin-23 receptor subunit expression is mediated by the Janus kinase/signal transducer and activation of transcription pathway in human CD4T cells. J Interferon Cytokine Res. 2011 Apr;31(4):363-71. doi: 10.1089/jir.2010.0083. Epub 2010 Dec 7. PubMed PMID: 21138378.

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