

PRODUCT INFORMATION



SD-1029

Item No. 21029

CAS Registry No.: 118372-34-2
Formal Name: 9-(3,4-dichlorophenyl)-2,7-bis[(dimethylamino)methyl]-3,4,5,6,7,9-hexahydro-1H-xanthene-1,8(2H)-dione, dihydrobromide

Synonyms: JAK2 Inhibitor III, Janus-Associated Kinase 2 Inhibitor III

MF: C₂₅H₃₀Cl₂N₂O₃ • 2HBr

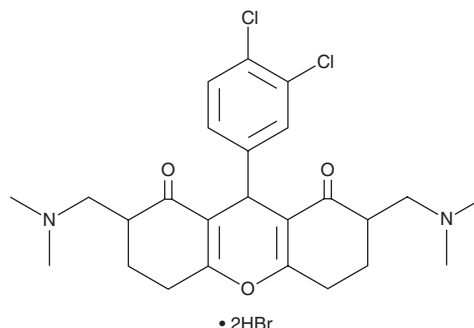
FW: 639.3

Purity: ≥80% (mixture of isomers)

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SD-1029 is supplied as a solid. A stock solution may be made by dissolving the SD-1029 in the solvent of choice, which should be purged with an inert gas. SD-1029 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

Description

SD-1029 is a Janus kinase 2 (JAK2) inhibitor.^{1,2} It inhibits autophosphorylation of recombinant JAK2 when used at concentrations of 30 and 100 μM and decreases levels of phosphorylated JAK2, but not JAK1 or Src, in MDA-MB-468 and paclitaxel-resistant OVCAR8_{TR} cells when used at a concentration of 10 μM.¹ SD-1029 (10 μM) decreases levels of phosphorylated STAT3 in MDA-MB-468, MDA-BM-435, OVCAR8_{TR}, and SKOV3_{TR} cells and inhibits IL-6-induced nuclear translocation of STAT3 in BHK-21 and U2OS cells.¹ It decreases the viability of and increases levels of cleaved caspase-3 in SNU-387, SNU-398, HepG2, and Huh7 hepatocellular carcinoma cells when used at a concentration of 10 μM.³ SD-1029 (100 and 1,000 nM) inhibits hepatitis A virus replication in GL37 cells.²

References

1. Duan, Z., Bradner, J.E., Greenberg, E., *et al.* SD-1029 inhibits signal transducer and activator of transcription 3 nuclear translocation. *Clin. Cancer Res.* **12(22)**, 6844-6852 (2006).
2. Jiang, X., Kanda, T., Wu, S., *et al.* Suppression of La antigen exerts potential antiviral effects against Hepatitis A virus. *PLoS One* **9(7)**, e101993 (2014).
3. Liu, Y., Liu, A., Xu, Z., *et al.* XZH-5 inhibits STAT3 phosphorylation and causes apoptosis in human hepatocellular carcinoma cells. *Apoptosis* **16(5)**, 502-510 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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