

PRODUCT INFORMATION



W1131

Item No. 42902

CAS Registry No.: 2740522-79-4
Formal Name: 5-nitro-N-[4-[7-(1,2,3,6-tetrahydro-4-pyridinyl)imidazo[1,2-a]pyridin-3-yl]phenyl]-2-furancarboxamide

MF: C₂₃H₁₉N₅O₄

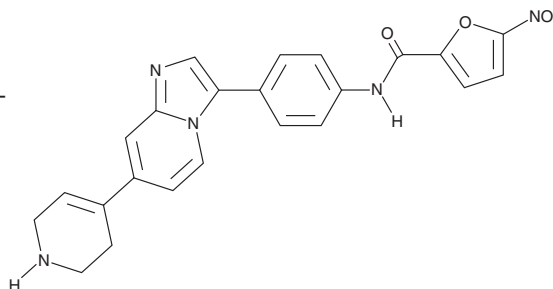
FW: 429.4

Purity: ≥98%

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

W1131 is supplied as a solid. A stock solution may be made by dissolving the W1131 in the solvent of choice, which should be purged with an inert gas. W1131 is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

W1131 is a STAT3 inhibitor.¹ It selectively inhibits the phosphorylation of STAT3 over STAT1, STAT5, JAK2, and Akt in AGS gastric adenocarcinoma cells at 3 μ M. W1131 binds to STAT3 in a cell-free assay (K_d = 7.55 μ M) and increases the thermal stability of STAT3 in a cellular thermal shift assay (CETSA) using AGS cells when used at a concentration of 1 μ M. It also inhibits STAT3 dimerization, nuclear accumulation, and transcriptional activation in cell-based assays. W1131 (3 μ M) induces cell death in AGS cells, which can be reversed by Z-VAD-FMK (Z-VA-DL-D(OMe)-FMK; Item No. 27421), ferrostatin-1 (Item No. 17729), liproxstatin-1 (Item No. 17730), deferoxamine (DFO; Item No. 14595), necrosulfonamide (Item No. 20844), or bafilomycin A₁ (Item No. 11038). *In vivo*, W1131 (10 mg/kg) decreases tumor volume and weight in 5-fluorouracil-sensitive and -resistant MGC803 gastric cancer mouse xenograft models.

Reference

1. Ouyang, S., Li, H., Lou, L., *et al.* Inhibition of STAT3-ferroptosis negative regulatory axis suppresses tumor growth and alleviates chemoresistance in gastric cancer. *Redox Biol.* **52**:102317, (2022).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM