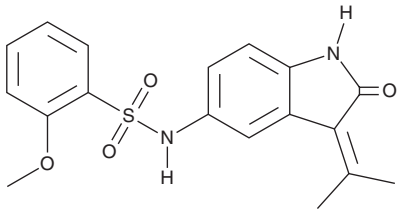
PRODUCT INFORMATION

BRD4 Inhibitor 20

Item No. 46738

CAS Registry No.: 2490311-14-1
Formal Name: N-[2,3-dihydro-3-(1-methylethylidene)-2-oxo-1H-indol-5-yl]-2-methoxy-benzenesulfonamide
Synonyms: Bromodomain containing protein 4-IN-20, Bromodomain containing protein 4 Inhibitor 20, BRD4-IN-20, XY-1
MF: $C_{18}H_{18}N_2O_4S$
FW: 358.4
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

BRD4 Inhibitor 20 is supplied as a solid. A stock solution may be made by dissolving the BRD4 Inhibitor 20 in the solvent of choice, which should be purged with an inert gas. BRD4 Inhibitor 20 is soluble (≥10 mg/ml) in DMSO.

Description

BRD4 inhibitor 20 is an inhibitor of bromodomain-containing protein 2 (BRD2) and BRD4 (IC_{50}s = 24, 18, 19, and 28 nM for BRD2 BD1, BRD2 BD2, BRD4 BD1, and BRD4 BD2, respectively).[1] It selectively inhibits the proliferation of HL-60 leukemia and HT-29 colon cancer cells over WI38 fibroblasts (IC_{50}s = 1.35, 4.75, and 44.07 µM, respectively) and induces cell cycle arrest at the G_1 phase in HT-29 cells. BRD4 inhibitor 20 decreases the levels of protein arginine methyltransferase 1 (PRMT1), PRMT4, PRMT5, PRMT7, and Myc, reduces histone symmetric and asymmetric dimethylarginine levels, and induces apoptosis in MV4-11 and HL-60 leukemia cells.[2] It decreases tumor volume in an MV4-11 mouse xenograft model at 30 mg/kg.

References

1. Xu, Y., Zhang, X.-J., Li, W.-B., *et al.* Design, synthesis and biological evaluation of indole-2-one derivatives as potent BRD4 inhibitors. *Eur. J. Med. Chem.* **208,** 112780 (2020).
2. Dong, S., Yang, R., Wang, Y., *et al.* A novel 3-alkenylindol-2-one derivative selectively inhibits the growth of acute myeloid leukemia via modulation of the MYC-PRMT pathway. *Biochem. Pharmacol.* **240,** 117111 (2025).

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.

WARRANTY AND LIMITATION OF REMEDY
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