

NVP-BSK805 (dihydrochloride)

Catalog No: tcsc2287



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1942919-79-0

Formula:

$C_{27}H_{30}Cl_2F_2N_6O$

Pathway:

Epigenetics;Stem Cell/Wnt;JAK/STAT Signaling

Target:

JAK;JAK;JAK

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

BSK805 dihydrochloride

Observed Molecular Weight:

563.47

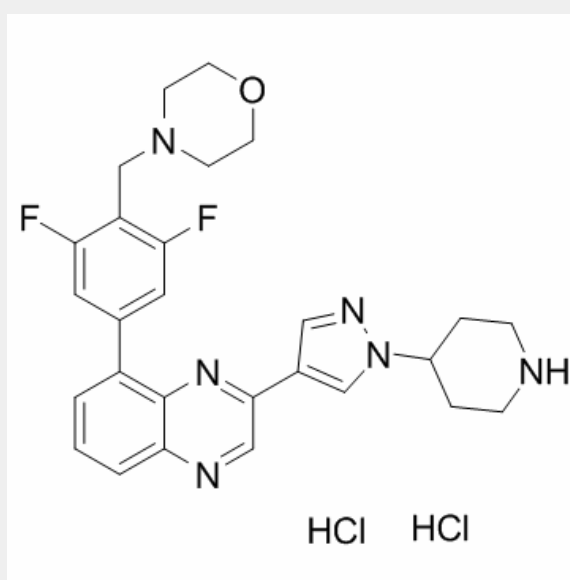
Product Description

NVP-BSK805 dihydrochloride is an ATP-competitive **JAK2** inhibitor, with **IC₅₀**s of 0.48 nM, 31.63 nM, 18.68 nM, and 10.76 nM for JAK2 JH1 (JAK homology 1), JAK1 JH1, JAK3 JH1, and TYK2 JH1, respectively.

IC50 & Target: IC50: 0.48 nM (JAK2 JH1), 31.63 nM (JAK1 JH1), 18.68 nM (JAK3 JH1), 10.76 nM (TYK2 JH1), 0.56 nM (FL JAK2 V617F), 0.58 nM (FL JAK2 wt)^[1]

In Vitro: NVP-BSK805 dihydrochloride is a JAK2 inhibitor, with IC₅₀s of 0.48 nM, 31.63 nM, 18.68 nM, and 10.76 nM for JAK2 JH1 (JAK homology 1), JAK1 JH1, JAK3 JH1, and TYK2 JH1, respectively. NVP-BSK805 inhibits the full-length wild-type JAK2 (FL JAK2 wt) and FL JAK2 V617F activity, with IC₅₀s of 0.58 ± 0.03 and 0.56 ± 0.04 nM. NVP-BSK805 is ATP-competitive, with calculated K_i of 0.43 ± 0.02 nM. NVP-BSK805 suppresses the growth of JAK2^{V617F}-bearing acute myeloid leukemia cell lines with GI₅₀ of V617F-mutant cell lines^[1]. NVP-BSK805 (5 μM) improves P-gp inhibitory activity. NVP-BSK805 increases sensitization of drug-resistant KBV20C cancer cells to VIC treatment at 10 μM, and such an effect is more effective than a 5 μM dose^[2].

In Vivo: NVP-BSK805 (150 mg/kg, p.o.) blocks STAT5 phosphorylation, splenomegaly, and leukemic cell spreading in a Ba/F3 JAK2 V617F cell-driven mouse model. NVP-BSK805 (50, 75, and 100 mg/kg, p.o.) also suppresses rhEpo-mediated polycythemia and splenomegaly in BALB/c mice^[1].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!