



NSC 42834

Catalog No: tcsc1006



Available Sizes

Size: 5mg



Specifications

CAS No:

195371-52-9

Formula:

 $C_{23}H_{24}N_2O$

Pathway:

Epigenetics; Stem Cell/Wnt; JAK/STAT Signaling

Target:

JAK;JAK;JAK

Purity / Grade:

>98%

Solubility:

DMSO : \geq 43 mg/mL (124.84 mM)

Alternative Names:

JAK2 Inhibitor V;Z3

Observed Molecular Weight:

344.45

Product Description

NSC 42834 a novel specific inhibitor of Jak2, inhibits Jak2-V617F and Jak2-WT autophosphorylation in a dose-dependent manner but was not cytotoxic to cells at concentrations that inhibited kinase activity.

IC50 & Target: Jak2; Jak2-V617F.

In Vitro:





NSC 42834 selectively inhibited Jak2 kinase function with no effect on Tyk2 or c-Src kinase function. NSC 42834 significantly inhibited proliferation of the Jak2-V617F-expressing, human erythroleukemia cell line, HEL 92.1.7. The NSC 42834-mediated reduction in cell proliferation correlated with reduced Jak2 and STAT3 tyrosine phosphorylation levels as well as marked cell cycle arrest. Finally, NSC 42834 inhibited the growth of hematopoietic progenitor cells isolated from the bone marrow of an essential thrombocythemia patient harboring the Jak2-V617F mutation and a polycythemia vera patient carrying a Jak2-F537I mutation.

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