Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

BAY 61-3606 (dihydrochloride)

Catalog No: tcsc0234

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
648903-57-5

Formula:
$C_{20}H_{20}Cl_2N_6O_3$

Pathway:
Protein Tyrosine Kinase/RTK

Target:
Syk

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 4.7 mg/mL (10.14 mM)

Alternative Names:
BAY 61-3606

Observed Molecular Weight:
463.32

Product Description

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BAY 61-3606 (dihydrochloride) is a potent, ATP-competitive, reversible, and highly selective inhibitor of **Syk tyrosine kinase** (**IC_{50}** =10 nM) with no inhibitory effect on Btk, Fyn, Itk, Lyn, and Src.

IC50 & Target: IC50: 10 nM (Syk)

In Vitro: BAY 61-3606 inhibits the release of various inflammatory mediators in a concentration-dependent manner. The IC_{50} values for the FcεRI-mediated hexosaminidase release from a rat basophilic leukemia cell line, RBL-2H3, and serotonin release from rat peritoneal mast cells are found to be 46 and 17 nM, respectively. BAY 61-3606 inhibits FcεRI-mediated histamine and tryptase release from HCMCs with IC_{50} values of 5.1 and 5.5 nM, respectively, in a manner similar to its effect on the degranulation of RBL-2H3 cells and rat peritoneal mast cells. BAY 61-3606 inhibits histamine release from leukocytes in high and low IgE groups equipotently, giving IC_{50} values of 8.1 and 10 nM, respectively[1]. BAY 61-3606 affects viability in cells expressing mutant K-RAS or B-RAF through a MAPK-independent pathway. Inhibition of SYK is not responsible for the BAY 61-3606 effect on cell viability in colorectal cancer cells. MAP4K2 is a target for BAY 61-3606 that modulates the response of wild-type cells to AZ-628[2]. BAY61-3606 has a 50% Cytotoxicity Concentration (CC_{50}) value of greater than 100 μM, and it inhibits AD169 replication[3].

In Vivo: BAY 61-3606 (3, 10, 30, 100 mg/kg, p.o.) dose dependently inhibits the PCA reaction with an ED_{50} value of 8 mg/kg. In a bronchoconstriction model, BAY 61-3606 dose dependently inhibits the DNP-BSA-induced increase in pulmonary pressure, and the dose of 3 mg/kg shows statistically significant suppression[1].