



BMS-345541

Product Description

Catalog No: tcsc0046

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Specifications
CAS No: 547757-23-3
Formula: C ₁₄ H ₁₈ CIN ₅
Pathway: NF-κΒ
Target: IKK
Purity / Grade: >98%
Solubility: 10 mM in DMSO
Alternative Names: BMS-345541 hydrochloride
Observed Molecular Weight: 291.78





BMS-345541 is a selective inhibitor of the catalytic subunits of **IKK** (**IKK-2** IC_{50} =0.3 μ M, **IKK-1** IC_{50} =4 μ M). BMS-345541 binds at an allosteric site of IKK.

IC50 & Target: IC50: 0.3 μM (IKK2), 4 μM (IKK1)

In Vitro: BMS-345541 inhibits IKK-2 and IKK-1 in dose-dependent manner. BMS-345541 fails to inhibit a panel of both serine/threonine and tyrosine kinases at concentrations as high as 100 μ M. MS-345541 at concentrations as high as 100 μ M fails to block both the anisomycin-stimulated phosphorylation of c-Jun and LPS-stimulated activation of MAPKAP K2 in THP-1 cells, as well as the EGF-stimulated phosphorylation of STAT3 in H292 cells^[1]. BMS-345541 treatment results in a concentration-dependent inhibition of melanoma cell proliferation in SK-MEL-5, A375, and Hs 294T cells. BMS-345541 (0, 100 μ M) shows apoptotic features as revealed by TUNEL staining and nuclear condensation^[2].

In Vivo: BMS-345541 (10 mg/kg, p.o.) results in prolonged serum drug levels, with concentrations sustained at or above 1 μM for many hours in mice. BMS-345541 dose-dependently inhibits the production of TNFα measured in the serum of animals challenged with an intraperitoneal administration of LPS^[1]. BMS-345541 (0, 10, 25, and 75 mg/kg, p.o.) effectively inhibits SK-MEL-5 tumor growth in a dose-dependent manner in the mice. Tumor-bearing mice treated with 75 mg/kg of BMS-345541 show effective inhibition of growth of SK-MEL-5, A375, and Hs 294T tumors by $86\pm2.8\%$, $69\pm11\%$ and $67\pm3.4\%$, respectively^[2]. BMS-345541 (30 and 100 mg/kg, p.o.) is effective in blocking both clinical and histological endpoints of inflammation and injury in mice^[3].

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