

BMS-509744

Catalog No: tcsc0049



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



Specifications

CAS No:

439575-02-7

Formula:

$C_{32}H_{41}N_5O_4S_2$

Pathway:

Protein Tyrosine Kinase/RTK

Target:

Itk

Purity / Grade:

>98%

Solubility:

DMSO : 21.9 mg/mL (35.11 mM; Need ultrasonic and warming)

Observed Molecular Weight:

623.83

Product Description

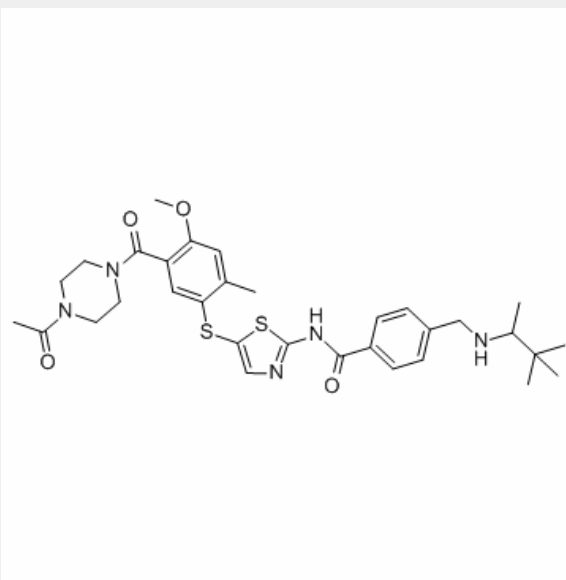
BMS-509744 is a potent and selective **Itk** inhibitor with an **IC₅₀** of 19 nM.

IC50 & Target: IC50: 19 nM (Itk)^[1]

In Vitro:

BMS-509744 reduces T-cell receptor-induced functions including PLC γ 1 tyrosine phosphorylation, calcium mobilization, IL-2 secretion, and T-cell proliferation *in vitro* in both human and mouse cells. BMS-488516 and BMS-509744 potently inhibit Itk *in vitro* with IC₅₀ values of 96 and 19 nM, respectively. Both compounds exhibit competitive kinetics with respect to ATP, suggesting that they bind to the ATP binding site of the Itk kinase domain^[1].

In Vivo: BMS-509744 and BMS-488516 suppress the production of IL-2 induced by anti-T-cell receptor antibody administered to mice. BMS-509744 exhibits a 50% inhibitory capacity when dosed at 50 mg/kg, irrespective of the amount of induction antibody. BMS-509744 also significantly diminishes lung inflammation in a mouse model of ovalbumin-induced allergy/asthma^[1].



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