

## **Data Sheet**

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 Product Name
 :
 BMS-509744

 Cat. No.
 :
 PC-42806

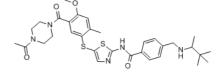
 CAS No.
 :
 439575-02-7

 Molecular Formula
 :
 C<sub>32</sub>H<sub>41</sub>N<sub>5</sub>O<sub>4</sub>S<sub>2</sub>

 Molecular Weight
 :
 623.829

Target : I⊤K

Solubility :



## **Biological Activity**

BMS-509744 is a potent, selective, ATP-competitive **IL2--inducible T cell kinase (ITK)** inhibitor with IC50 of 19 nM. BMS-509744 displays >200-fold selectivity over others Tec family tyrosine kinases and > 30-fold over a broad panel protein kinases

BMS-509744 reduces TCR-induced functions including PLC<sub>γ</sub>1 tyrosine phosphorylation, calcium mobilization, IL-2 secretion and T-cell proliferation in vitro.

BMS-509744 significantly diminishes lung inflammation in mouse model of allergy/asthma; also potently blocks wild-type HIV-1 infectivity and replication in vitro.

## References

Lin TA, et al. *Biochemistry*. 2004 Aug 31;43(34):11056-62.

Dondorf S, et al. *J Biol Chem*. 2015 Apr 17;290(16):10568-9.

Tarafdar S, et al. *J Biol Chem*. 2014 May 30;289(22):15718-28.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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