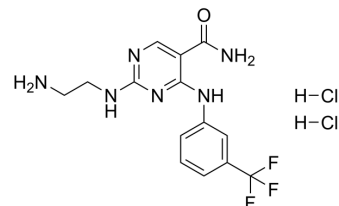


Syk Inhibitor II dihydrochloride

Cat. No.:	HY-112390
CAS No.:	227449-73-2
Molecular Formula:	C ₁₄ H ₁₇ Cl ₂ F ₃ N ₃ O
Molecular Weight:	413.23
Target:	5-HT Receptor; Syk
Pathway:	GPCR/G Protein; Neuronal Signaling; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Syk Inhibitor II dihydrochloride is a potent, high selective and ATP-competitive Syk inhibitor with an IC ₅₀ of 41 nM. Syk Inhibitor II dihydrochloride inhibits 5-HT release from RBL-cells with an IC ₅₀ of 460 nM. Syk Inhibitor II dihydrochloride shows less potent against other kinases and has anti-allergic effect ^[1] .								
IC₅₀ & Target	5-HT Receptor 460 nM (IC ₅₀)								
In Vitro	Syk Inhibitor II (compound 9a) dihydrochloride shows less potent against PKCε, PKCβ2, ZAP-70, Btk, and Itk with IC ₅₀ values of 5.1 μM, 11 μM, 11.2 μM, 15.5 μM, and 22.6 μM, respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	Syk Inhibitor II (Compound 9a; 10-100 mg/kg) dihydrochloride is subcutaneously administered to mice 30 min before antigen challenge. Syk Inhibitor II inhibits the anaphylaxis reaction dose-dependently with an ID ₅₀ value of 13.2 mg/kg ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>ICR mice^[1]</td> </tr> <tr> <td>Dosage:</td> <td>10, 30, 100 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>S.c.; 30 min before antigen challenge</td> </tr> <tr> <td>Result:</td> <td>Inhibited the anaphylaxis reaction dose-dependently with an ID₅₀ value of 13.2 mg/kg.</td> </tr> </table>	Animal Model:	ICR mice ^[1]	Dosage:	10, 30, 100 mg/kg	Administration:	S.c.; 30 min before antigen challenge	Result:	Inhibited the anaphylaxis reaction dose-dependently with an ID ₅₀ value of 13.2 mg/kg.
Animal Model:	ICR mice ^[1]								
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Administration:	S.c.; 30 min before antigen challenge								
Result:	Inhibited the anaphylaxis reaction dose-dependently with an ID ₅₀ value of 13.2 mg/kg.								

REFERENCES

[1]. Hiroyuki Hisamichi, et al. Synthetic studies on novel Syk inhibitors. Part 1: Synthesis and structure-activity relationships of pyrimidine-5-carboxamide derivatives. *Bioorg Med Chem.* 2005 Aug 15;13(16):4936-51.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA