

A-770041

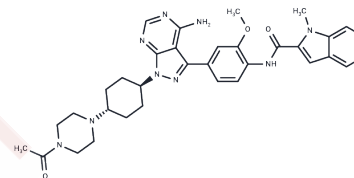
Chemical Properties

CAS No. : 869748-10-7

Formula: C34H39N9O3

Molecular Weight: 621.73

Storage: Store at low temperature, Keep away from direct sunlight
 Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	A-770041 is an orally active and selective Lck inhibitor that inhibits concanavalin A-stimulated IL-2 production in whole blood and prevents cardiac allograft rejection. A-770041 reduces pulmonary fibrosis by inhibiting TGF- β production in regulatory T cells.
Targets(IC50)	Src
In vitro	A-770041 selectively inhibited LCK with IC50=0.147 μ M; A-770041 inhibited other SRC family kinases with SRC IC50=9.1 μ M, FGR IC50=14.1 μ M, and FYN IC50=44.1 μ M. [1] A-770041 dose-dependently (0-30 μ M; 2 h) inhibited anti-CD3-induced IL-2 production with an EC50 = 80 nM. [1]
In vivo	Recipient animals were treated with vehicle control or 2.5 to 20 mg/kg/day of A-770041 in equally. Animals were treated for 14 days, and graft viability was assessed by abdominal palpation each day. A-770041 dosed at 2.5 mg/kg/day did not lengthen graft survival time. There was a dose-dependent increase in survival with doses of 5 and 10 mg/kg/day. At doses of 10 and 20 mg/kg/day of A-770041, 100% of transplanted grafts were still beating at 14 days. [1]

Solubility Information

Solubility	DMSO: 20 mg/mL (32.17 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6084 mL	8.0421 mL	16.0842 mL
5 mM	0.3217 mL	1.6084 mL	3.2168 mL
10 mM	0.1608 mL	0.8042 mL	1.6084 mL
50 mM	0.0322 mL	0.1608 mL	0.3217 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Stachlewitz RF, et al. A-770041, a novel and selective small-molecule inhibitor of Lck, prevents heart allograft rejection. *J Pharmacol Exp Ther.* 2005 Oct;315(1):36-41.

Burchat A, et al. Discovery of A-770041, a src-family selective orally active lck inhibitor that prevents organ allograft rejection. *Bioorg Med Chem Lett.* 2006 Jan 1;16(1):118-22.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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