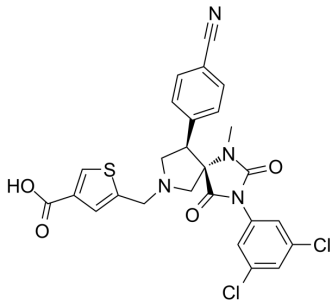
BMS-587101

Cat. No.:	HY-120628
CAS No.:	509083-77-6
Molecular Formula:	$C_{26}H_{20}Cl_2N_4O_4S$
Molecular Weight:	555.43
Target:	Integrin
Pathway:	Cytoskeleton
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 260 mg/mL (468.11 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.8004 mL	9.0020 mL	18.0041 mL
5 mM	0.3601 mL	1.8004 mL	3.6008 mL
10 mM	0.1800 mL	0.9002 mL	1.8004 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 6.5 mg/mL (11.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BMS-587101 is a potent and orally active antagonist of leukocyte function associated antigen-1 (LFA-1). BMS-587101 has anti-inflammatory effects and can be used for rheumatoid arthritis research[1][2].

In Vitro

BMS-587101 is a moderately potent inhibitor of LFA-1-mediated T-cell proliferation, with an IC_{50} of 20 nM in human HUVEC cells. BMS-587101 inhibits LFA-1-mediated adhesion of T cells to endothelial cells, T cell proliferation, and Th1 cytokine production[1][2].

In mouse splenocytes and a mouse ICAM-1 expressing cell lines, bEND, BMS-587101 shows inhibitory activities, with an IC_{50} of 150 nM[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

In the mouse ovalbumin-induced lung inflammation model, BMS-587101 (0.1 mg/kg, 1.0 mg/kg, and 10 mg/kg; po.; twice a day) treatment significantly inhibits eosinophil accumulation[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Dominique Potin, et al. Discovery and development of 5-[(5S,9R)-9-(4-cyanophenyl)-3-(3,5-dichlorophenyl)-1-methyl-2,4-dioxo-1,3,7-triazaspiro[4.4]non-7-yl-methyl]-3-thiophenecarboxylic acid (BMS-587101)--a small molecule antagonist of leukocyte function associated antigen-1. J Med Chem. 2006 Nov 30;49(24):6946-9.

[2]. Suzanne J Suchard, et al. An LFA-1 (alphaLbeta2) small-molecule antagonist reduces inflammation and joint destruction in murine models of arthritis. J Immunol. 2010 Apr 1;184(7):3917-26.

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