Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Arginase inhibitor 1

Catalog No: tcsc1736

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1345808-25-4

Formula:
$C_{13}H_{27}BN_2O_4$

Pathway:
Immunology/Inflammation;Metabolic Enzyme/Protease

Target:
Arginase;Arginase

Purity / Grade:
>98%

Solubility:
H2O : ≥ 30 mg/mL (104.83 mM); DMSO : ≥ 48 mg/mL (167.73 mM)

Observed Molecular Weight:
286.18

Product Description

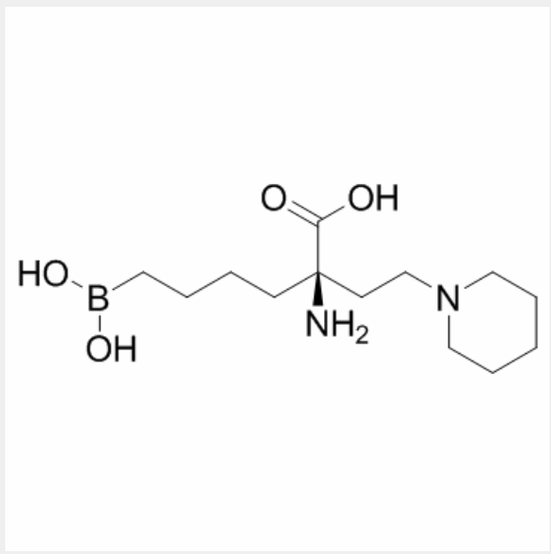
Arginase inhibitor 1 is a potent inhibitor of human **arginases I** and **II** with **IC_{50}**s of 223 and 509 nM, respectively.

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

IC50 & Target: IC50: 223 nM (arginases I), 509 nM (arginases II)[1]

In Vitro: Arginase inhibitor 1inhibits human arginases I and II with IC_{50}s of 223±22.3 and 509±85.1 nM, respectively, and is active in a recombinant cellular assay overexpressing human arginase I (CHO cells). Arginase inhibitor 1 is a novel second generation arginase inhibitor with significant activity in a rat model of myocardial ischemia/reperfusion injury (MI/RI). Arginase inhibitor 1 is potent against hARG I in both in vitro enzyme and cellular assays. The IC_{50} for Arginase inhibitor 1 is 8 μM in CHO Cells Over-Expressing hArgI[1].

In Vivo: A pharmacokinetic evaluation of Arginase inhibitor 1 is conducted after intravenous (i.v.) and oral (p.o.) dosing in male Sprague-Dawley rats (n=3 per dose route). Arginase inhibitor 1 is formulated in 0.9% saline and administered intravenously at 10 mg/kg by bolus through a preimplanted cannula at a dosing volume of 1 mL/kg, and orally at 10 mg/kg via gavage at a dosing volume of 2 mL/kg. Following i.v. dosing with 10 mg/kg in fasted animals, Arginase inhibitor 1has a terminal elimination half-life ($t_{1/2}$) of 3.3 h with a volume of distribution and total body clearance of 1.86 L/kg and 7.89 mL/min/kg, respectively. The oral bioavailability of Arginase inhibitor 1 (10 mg/kg, p.o.) is 28% with a C_{max} of 0.45 mg/L[1].



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