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

NS1652

Catalog No: tcsc0018395

Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg

Specifications

CAS No:
1566-81-0

Formula:
$C_{15}H_{11}F_3N_2O_3$

Pathway:
Membrane Transporter/Ion Channel

Target:
Chloride Channel

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
324.25

Product Description

NS1652 is a reversible **anion conductance** inhibitor, blocks **chloride channel**, with an **IC_{50}** of 1.6 μM in human and mouse red blood cells.

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IC50 & Target: IC50: 1.6 μM (chloride channel, human and mouse red blood cell)[1]

In Vitro: NS1652 potently inhibits the chloride conductance (IC_{50}, 1.6 μM) in human and mouse red blood cells, but only weakly inhibits VRAC (IC_{50}, 125 μM) in HEK293 cells. NS1652 markedly blocks the NO production with an IC_{50} of 3.1 μM in BV2 cells. NS1652 also down-regulates iNOS expression at 3 μM, and completely abolishes at 10 μM in BV2 cells[1]. NS1652 (0, 1.0, 3.3, 10, and 20 μM) causes increasing hyperpolarization due to inhibition of the chloride conductance in normal erythrocytes. NS1652 lowers the net KCl loss from deoxygenated sickle cells from about 12 mM cells/h to about 4 mM cells/h. NS1652 (20 μM) completely and reversiblely inhibits the red cell Cl^-conductance[2].

In Vivo: NS1652 (50 mg/kg, i.v.) blocks murine erythrocyte Cl^- conductance by >90% in mice[2].