MOLNOVA
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Datasheet (Version 1.0)

Product Name	:	NS1652
Synonyms	:	——
Cat No.	:	M22621
CAS Number	:	1566-81-0
Molecular Formula	:	C15H11F3N2O3
Formula Weight	:	324.25
Chemical Name	:	——
Description	:	NS1652 is an anion conductance inhibitor. NS1652 blocks chloride channel has an IC50 of 1.6 μM in human and mouse red blood cells.NS1652 (20 μM) fully and reversibly inhibits the red cell Cl-conductance. NS1652 effectively inhibits the chloride conductance (IC50, 1.6 μM) in human and mouse red blood cells, but only weakly inhibits VRAC (IC50, 125 μM) in HEK293 cells. NS1652 markedly blocks the NO production (IC50: 3.1 μM in BV2 cells). NS1652 also down-regulates iNOS expression at 3 μM and fully abolishes at 10 μM in BV2 cells. NS1652 (0, 1.0, 3.3, 10, and 20 μM) induces 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. In mice, NS1652 (50 mg/kg, i.v.) blocks murine erythrocyte Cl- conductance by >90%.
Pathway	:	Membrane Transporter/Ion Channel
Target	:	Chloride Channel
Receptor	:	chloride channel
Solubility	:	DMSO:4.9 mg/mL (15.11 mM; Need ultrasonic)
SMILES	:	OC(=O)c1ccccc1NC(=O)Nc1cccc(c1)C(F)(F)F
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	

1. Kjaer K, et al. Chloride channel blockers inhibit iNOS expression and NO production in IFNgamma-stimulated microglial BV2 cells. Brain Res. 2009 Jul 24;1281:15-24.