Web: www.taiclone.com
Tel: +886-2-2735-9682
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SN 6

Catalog No: tcsc0029062

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Specifications

CAS No:
415697-08-4

Formula:
$C_{20}H_{22}N_2O_5S$

Pathway:
Membrane Transporter/Ion Channel

Target:
Na+/Ca2+ Exchanger

Purity / Grade:
>98%

Solubility:
DMSO : 62.5 mg/mL (155.29 mM; Need ultrasonic); H2O :

Observed Molecular Weight:
402.46

Product Description

SN 6 is a selective **Na^+/Ca^{2+} exchanger (NCX)** inhibitor, and inhibits $^{45}Ca^{2+}$ uptake by NCX1, NCX2, and NCX3, with **IC_{50}**s of 2.9, 16, and 8.6 μM, respectively.

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IC50 & Target: IC50□2.9 μM (NCX1), 16 μM (NCX2), 8.6 μM (NCX3)[1]

In Vitro: SN 6 is a selective Na^+/Ca^{2+} exchanger inhibitor, which inhibits the initial rate of $^{45}Ca^{2+}$ uptake into NCX1, NCX2, and NCX3 transfectants with IC_{50} values of 2.9 ± 0.12, 16 ± 1.1, and 8.6 ± 0.27 μM. SN 6 (up to 30 μM) also less potently inhibits muscarinic acetylcholine receptor, with a higher IC_{50} of 18 μM. SN 6 (0.3-30 μM) completely inhibits the initial rate of Na^+_i-dependent $^{45}Ca^{2+}$ uptake into Na^+-loaded sarcolemmal vesicles in a dose dependent manner (IC_{50}, 5.3 ± 0.37 μM). SN 6 (0.3-10 μM) dose-dependently protects against the hypoxia/reoxygenation-induced LDH release in parental LLC-PK1 cells and NCX1 transfectants but not in K229Q transfectants[1]. SN 6 (1-30 μM) suppresses the bidirectional outward and inward I_{NCX} in a concentration-dependent manner, with IC_{50} values of 2.3 μM and 1.9 μM, respectively. SN 6 also inhibits bidirectional current (I_{NCX}) in a $[Na^+]i$ concentration-dependent manner, with IC_{50} values of 3.4 μM, 2.3 μM, and 1.1 μM at 10 mM, 20 mM, and 30 mM $[Na^+]i$, respectively[2]. SN 6 inhibits hypoxia/reoxygenation-induced LDH release with an IC_{50} value of 0.63 ± 0.15 μM in NCX1 transfectants [3].