

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:

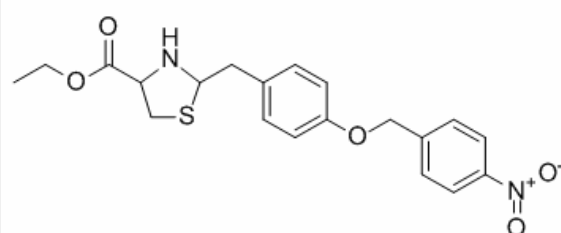
402.46

Product Description

SN 6 is a selective **Na⁺/Ca²⁺ exchanger (NCX)** inhibitor, and inhibits ⁴⁵Ca²⁺ uptake by NCX1, NCX2, and NCX3, with **IC₅₀**s of 2.9, 16, and 8.6 μM, respectively.

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

In Vitro: SN 6 is a selective Na⁺/Ca²⁺ exchanger inhibitor, which inhibits the initial rate of ⁴⁵Ca²⁺ uptake into NCX1, NCX2, and NCX3 transfectants with IC₅₀ 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 IC₅₀ of 18 μM. SN 6 (0.3-30 μM) completely inhibits the initial rate of Na⁺_i-dependent ⁴⁵Ca²⁺ uptake into Na⁺-loaded sarcolemmal vesicles in a dose dependent manner (IC₅₀, 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 IC₅₀ 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 IC₅₀ 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 IC₅₀ value of 0.63 ± 0.15 μM in NCX1 transfectants^[3].



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