

## 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<sup>+</sup>/Ca<sup>2+</sup> Exchanger

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 62.5 mg/mL (155.29 mM; Need ultrasonic); H<sub>2</sub>O :

**Observed Molecular Weight:**

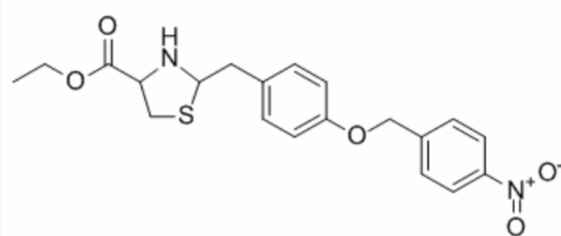
402.46

### Product Description

SN 6 is a selective **Na<sup>+</sup>/Ca<sup>2+</sup> exchanger (NCX)** inhibitor, and inhibits <sup>45</sup>Ca<sup>2+</sup> uptake by NCX1, NCX2, and NCX3, with **IC<sub>50</sub>**s of 2.9, 16, and 8.6 μM, respectively.

IC<sub>50</sub> & Target: IC<sub>50</sub> 2.9 μM (NCX1), 16 μM (NCX2), 8.6 μM (NCX3)<sup>[1]</sup>

**In Vitro:** SN 6 is a selective Na<sup>+</sup>/Ca<sup>2+</sup> exchanger inhibitor, which inhibits the initial rate of <sup>45</sup>Ca<sup>2+</sup> uptake into NCX1, NCX2, and NCX3 transfectants with IC<sub>50</sub> 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<sub>50</sub> of 18 μM. SN 6 (0.3-30 μM) completely inhibits the initial rate of Na<sup>+</sup><sub>i</sub>-dependent <sup>45</sup>Ca<sup>2+</sup> uptake into Na<sup>+</sup>-loaded sarcolemmal vesicles in a dose dependent manner (IC<sub>50</sub>, 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<sup>[1]</sup>. SN 6 (1-30 μM) suppresses the bidirectional outward and inward I<sub>NCX</sub> in a concentration-dependent manner, with IC<sub>50</sub> values of 2.3 μM and 1.9 μM, respectively. SN 6 also inhibits bidirectional current (I<sub>NCX</sub>) in a [Na<sup>+</sup>]<sub>i</sub> concentration-dependent manner, with IC<sub>50</sub> values of 3.4 μM, 2.3 μM, and 1.1 μM at 10 mM, 20 mM, and 30 mM [Na<sup>+</sup>]<sub>i</sub>, respectively<sup>[2]</sup>. SN 6 inhibits hypoxia/reoxygenation-induced LDH release with an IC<sub>50</sub> value of 0.63 ± 0.15 μM in NCX1 transfectants<sup>[3]</sup>.



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