



SN 2

Catalog No: tcsc3229



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

823218-99-1

Formula:

 $\mathsf{C}_{17}\mathsf{H}_{21}\mathsf{NO}$

Pathway:

Membrane Transporter/Ion Channel

Target:

TRP Channel

Purity / Grade:

>98%

Solubility:

DMSO: 23.5 mg/mL (92.03 mM; Need ultrasonic and warming)

Observed Molecular Weight:

255.35

Product Description

SN 2 is a novel and potent activator of **TRPML3** ion channel with EC_{50} of 1.8±0.13 μ M.

IC50 & Target: EC50: $1.8\pm0.13~\mu\text{M}$ (TRPML3), >29.9 μM (TRPML1)^[1]





In Vitro: The conductance of TRPML3 channels is estimate, when activated with 10 μ M SN-2 is approximately 10 pS at -80 mV. TRPML3-expressing HEK293 cells are perfused with a series starting with compound alone (in SBS), with compound in ELS, and finally with ELS alone. Two representative compounds, SF-24 and SN-2, are tested. SF-24 is one of the least effective compounds, and SN-2 is one of the most active ones. SN-2 has a similar synergistic effect, also reaching up-to 10-fold enhancement of the combined response when compared with the individual responses, reaching average current densities of up to 3 nA/pF at -80 mV. Dominant negative TRPML3(D458K) is highly effective in eliminating SN-2-induced activity in epidermal melanocytes, suggesting that SN-2 activates a channel that is not responsive in presence of TRPML3(D458K). Such a dominant negative action might be attributed to potential heteromerization of TRPML3(D458K) with an SN-2-responsive channel^[1].

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