



## Senicapoc

**Catalog No: tcsc0294** 



## **Available Sizes**

Size: 10mg

Size: 50mg

Size: 100mg



## **Specifications**

CAS No:

289656-45-7

Formula:

 $\mathsf{C_{20}H_{15}F_{2}NO}$ 

**Pathway:** 

Membrane Transporter/Ion Channel

**Target:** 

Potassium Channel

**Purity / Grade:** 

>98%

**Solubility:** 

DMSO: 50 mg/mL (154.64 mM; Need ultrasonic)

**Alternative Names:** 

ICA-17043

**Observed Molecular Weight:** 

323.34

## **Product Description**





Senicapoc is a potent and selective **Gardos channel** blocker with  $IC_{50}$  value of 11 nM, and blocks  $Ca^{2+}$ -induced rubidium flux from human RBCs with an  $IC_{50}$  value of 11 nM and inhibits RBC dehydration with  $IC_{50}$  of 30 nM.

IC50 & Target: IC50: 11 nM (Gardos channel)

In Vitro: ICA-17043 is shown to block the Gardos channel of mouse (C57 Black) RBCs with an IC $_{50}$  of 50±6 nM. ICA-17043 blocks this increase in cellular hemoglobin concentration in human RBCs in a concentration-dependent fashion<sup>[1]</sup>.

*In Vivo:* ICA-17043 (10 mg/kg, p.o.) administration produces a significant decrease in Gardos channel activity measured at day 11 and 21 and is associated with a corresponding increase in red cell K<sup>+</sup> content without changes in Na<sup>+</sup> content. ICA-17043 (10 mg/kg, twice a day) induces a significant increase in Hct after 11 days of dosing in the SAD mouse<sup>[1]</sup>. Senicapoc (30 mg/kg, p.o.) reduces airway hyperresponsiveness, eosinophil numbers in bronchoalveolar lavage taken 48 hours post-allergen challenge, and vascular remodelling in the sheep<sup>[2]</sup>.

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