

## **Data Sheet**

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 Product Name
 :
 ICA-27243

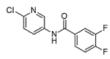
 Cat. No.
 :
 PC-60824

 CAS No.
 :
 325457-89-4

 Molecular Formula
 :
 C<sub>12</sub>H<sub>7</sub>ClF<sub>2</sub>N<sub>2</sub>O

 Molecular Weight
 :
 268.648

Target : Potassium Channel Solubility : 10 mM in DMSO



## **Biological Activity**

ICA-27243 (ICA-207243) is a potent, selective KCNQ2/Q3 (**Kv7.2/Kv7.3**) potassium channel opener/activator with EC50 of 0.38 µM

ICA-27243 enhances both (86)Rb(+) efflux (EC50= 0.2 microM) and whole-cell currents in CHO cells stably expressing heteromultimeric KCNQ2/Q3 channels (EC50= 0.4 microM).

ICA-27243 is less effective at activating KCNQ4 and KCNQ3/Q5 and is selective over a wide range of neurotransmitter receptors and ion channels such as voltage-dependent sodium channels and GABA-gated chloride channels. ICA-27243 (1-10 microM) reversibly suppresses seizure-like activity in an ex vivo hippocampal slice model of epilepsy and demonstrates in vivo anticonvulsant activity (ED(50) = 8.4 mg/kg) in the mouse maximal electroshock epilepsy model.

## References

Amato G, et al. ACS Med Chem Lett. 2011 Mar 31;2(6):481-4.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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