

## **Data Sheet**

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 Product Name
 :
 NS9283

 Cat. No.
 :
 PC-21601

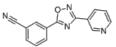
 CAS No.
 :
 913830-15-6

 Molecular Formula
 :
 C<sub>14</sub>H<sub>8</sub>N<sub>4</sub>O

 Molecular Weight
 :
 248.25

 Target
 :
 nAChR

**Solubility** : 10 mM in DMSO



## **Biological Activity**

NS9283 is a potent, positive allosteric modulator of  $\alpha4\beta2$  nAChR, acts selectively at  $3\alpha:2\beta$  stoichiometry of  $\alpha2*$  and  $\alpha4*$  nAChRs

NS9283 selectively increases ACh potency at the  $3\alpha:2\beta$  receptors while it does not modulate current conducted by the  $2\alpha:3\beta$  receptors.

NS9283 was demonstrated to increase the potency of ACh-evoked currents in HEK293-h $\alpha$ 4 $\beta$ 2 cells by left-shifting the concentration–response curve ~60-fold.

NS9283 has favourable effects on sensory information processing, as shown by reversal of PCP-disrupted pre-pulse inhibition.

NS9283 improved performance in a rat model of episodic memory (social recognition), a rat model of sustained attention.

## References

Timmermann DB, et al. Br J Pharmacol. 2012 Sep;167(1):164-82.

Grupe M, et al. Br J Pharmacol. 2013 Apr;168(8):2000-10.

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

E-mail: tech@probechem.com