

## **Data Sheet**

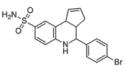
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Product Name : 4BP-TQS
Cat. No. : PC-38475
CAS No. : 360791-49-7
Molecular Formula : C<sub>18</sub>H<sub>17</sub>BrN<sub>2</sub>O<sub>2</sub>S
Molecular Weight : 405.310

Target : nAChR

**Solubility** : 10 mM in DMSO



## **Biological Activity**

4BP-TQS (GAT107 racemic) is a potent, selective, allosteric agonist of  $\alpha 7$  nAChRs with EC50 of 17 uM, no activity for  $\alpha 1\beta 1\delta \epsilon$ -,  $\alpha 3\beta 4$ -, and  $\alpha 4\beta 2$  subunit-containing nAChRs at 100 uM.

Metyllycaconitine is a noncompetitive antagonist of 4BP-TQS.

Mutation of an amino acid (M253L), located in a transmembrane cavity, completely blocks agonist activation by 4BP-TQS. 4BP-TQS acts as potentiator of acetylcholine responses, facilitates recovery of  $\alpha$ 7 nAChRs from desensitization.

## References

Thakur GA, et al. *J Med Chem*. 2013 Nov 14;56(21):8943-7.

Pałczyńska MM, et al. Mol Pharmacol. 2012 Nov;82(5):910-7.

Gill JK, et al. *Proc Natl Acad Sci U S A*. 2011 Apr 5;108(14):5867-72.

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

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