

Data Sheet

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 Product Name
 : 4BP-TQS

 Cat. No.
 : PC-38475

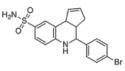
 CAS No.
 : 360791-49-7

 Molecular Formula
 : C₁₈H₁₇BrN₂O₂S

 Molecular Weight
 : 405 310

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 α 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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