A1899

MedChemExpress

| Cat. No.: | HY-103067 | |
|--------------------|---|--|
| CAS No.: | 498577-46-1 | |
| Molecular Formula: | $C_{30}H_{26}F_2N_2O_3$ | |
| Molecular Weight: | 500.54 | |
| Target: | Potassium Channel | |
| Pathway: | Membrane Transporter/Ion Channel | |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. | |
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| BIOLOGICAL ACTIVITY | | | | | |
|---------------------------|--|---|-------------------------------------|--------------------------------------|--|
| Description | A1899 is a potent and highly selective blocker of the K _{2P} channel TASK-1. A1899 has IC ₅₀ values of 35.1 nM and 7 nM for TASK-1 channels expressed in oocytes and CHO cells, respectively. A1899 is also an I _{Kur} blocker that can be used for the research of cardiovascular diseases ^{[1][2]} . | | | | |
| IC ₅₀ & Target | TASK-1 0.035 μΜ (IC ₅₀) | TASK-3 0.318 pg/mL (IC ₅₀) | TASK-2 12 μΜ (IC ₅₀) | TASK-4 8.1 μΜ (IC ₅₀) | |
| | TREK-1 23.8 μΜ (pIC ₅₀) | TREK-2 8.4 μΜ (IC ₅₀) | TRAAK >20 μM (IC ₅₀) | THIK-1 2.2 μΜ (IC ₅₀) | |
| | TRESK 0.9 μΜ (IC ₅₀) | Kv1.1 2.7 μM (IC ₅₀) | | | |

REFERENCES

[1]. Streit AK, et al. A specific two-pore domain potassium channel blocker defines the structure of the TASK-1 open pore. J Biol Chem. 2011 Apr 22;286(16):13977-84.

[2]. Knobloch K, et al. Electrophysiological and antiarrhythmic effects of the novel I(Kur) channel blockers, S9947 and S20951, on left vs. right pig atrium in vivo in comparison with the I(Kr) blockers dofetilide, azimilide, d,l-sotalol and ibutilide. Naunyn Schmiedebergs Arch Pharmacol. 2002 Nov;366(5):482-7.

Caution: Product has not been fully validated for medical applications. For research use only.

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