MedChemExpress

AVE-0118

| Cat. No.: | $\mathrm{HY}-118387$ |
| :--- | :--- |
| CAS No.: | $498577-53-0$ |
| Molecular Formula: | $\mathrm{C}_{30} \mathrm{H}_{29} \mathrm{~N}_{3} \mathrm{O}_{3}$ |
| Molecular Weight: | 479.57 |
| Target: | Potassium Channel |
| Pathway: | Membrane Transporter/lon Channel |
| Storage: | Please store the product under the recommended conditions in the Certificate of |
|  | Analysis. |

## BIOLOGICAL ACTIVITY

## Description

In Vivo
$\mathrm{IC}_{50}$ \& Target $\quad I C 50: 1.1 \mu \mathrm{M}(\mathrm{Kv1.5}), 3.4 \mathrm{uM}\left(\mathrm{I}_{\text {to }}\right), 4.5 \mathrm{uM}\left(\mathrm{I}_{\mathrm{KAch}}\right), 8.4 \mathrm{uM}\left(\mathrm{I}_{\mathrm{Kr}}\right)^{[1]}$

In Vitro $\quad$ AVE-0118 is shown to be a Kv1.5 blocker $\left(\mathrm{IC}_{50}=1.1 \mathrm{uM}\right)$ with moderate selectivity versus $I_{\mathrm{to}}(3.4 \mathrm{uM})$, $\mathrm{I}_{\mathrm{Kr}}(8.4 \mathrm{uM})$, and $\mathrm{I}_{\mathrm{KAch}}$ ( 4.5 uM ) and good selectivity versus $\mathrm{I}_{\mathrm{Ks}}, \mathrm{I}_{\mathrm{K} 1}, \mathrm{I}_{\text {KATP }}{ }^{[1]}$.
AVE-0118 ( $10 \mu \mathrm{M}$ ) significantly potentiates the electrical field stimulation (EFS)-induced neurogenic type of contractions ${ }^{[2]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
AVE-0118 is a nonselective Kv1.5 blocker with an $\mathrm{IC}_{50}$ of $1.1 \mu \mathrm{M}$. AVE-0118 is a multichannel inhibitor with weak, micromolar activity against Kv1.5 and other ion channels. It is inactive against $I_{K s}, I_{\text {KATP }}$, and L-type Ca+ channels ${ }^{[1]}$.

AVE-0118 reduces the inducibility of AF in goats with remodeled atria at a dose of $3 \mathrm{mg} / \mathrm{kg}$ and did not prolong QTc up to 5 $\mathrm{mg} / \mathrm{kg}{ }^{[1]}$.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Bilodeau MT, et al. Kv1.5 blockers for the treatment of atrial fibrillation: approaches to optimization of potency and selectivity and translation to in vivo pharmacology, Curr Top Med Chem. 2009;9(5):436-51.
[2]. Kun A, et al. Neurogenic contraction induced by the antiarrhythmic compound, AVE 0118, in rat small mesenteric arteries. Basic Clin Pharmacol Toxicol. 2014 Oct;115(4):315-20

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