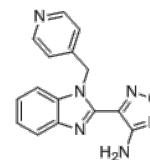


Product Name : C101248
Cat. No. : PC-49461
CAS No. : 361368-24-3
Molecular Formula : C₁₅H₁₂N₆O
Molecular Weight : 292.302
Target : Potassium Channel
Solubility : 10 mM in DMSO



Biological Activity

C101248 is the first selective small-molecule inhibitor of tandem pore domain halothane-inhibited K⁺ channel 1 (**THIK-1**) with IC₅₀ of 50 nM for both mouse and human THIK-1.

C101248 is selective for THIK-1 and is inactive against K₂P family members TREK-1 and TWIK-2, and Kv2.1.

C101248 potently blocked both tonic and ATP-evoked THIK-1 K⁺ currents in whole-cell patch-clamp recordings of microglia from mouse hippocampal slices.

C101248 had no effect on other constitutively active resting conductance in slices from THIK-1-depleted mice.

C101248 attenuated the NLRP3-dependent release of IL-1 β from microglia.

References

Bernardino Ossola, et al. *Neuropharmacology*. 2022 Nov 11;109330

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

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