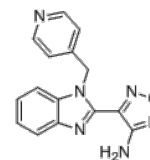


**Product Name** : C101248  
**Cat. No.** : PC-49461  
**CAS No.** : 361368-24-3  
**Molecular Formula** : C<sub>15</sub>H<sub>12</sub>N<sub>6</sub>O  
**Molecular Weight** : 292.302  
**Target** : Potassium Channel  
**Solubility** : 10 mM in DMSO



### Biological Activity

C101248 is the first selective small-molecule inhibitor of tandem pore domain halothane-inhibited K<sup>+</sup> channel 1 (**THIK-1**) with IC<sub>50</sub> 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<sup>+</sup> 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 $\beta$  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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