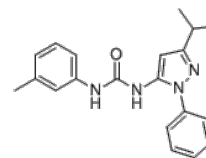


**Product Name** : VU0468554  
**Cat. No.** : PC-72820  
**CAS No.** : 1448705-21-2  
**Molecular Formula** : C<sub>20</sub>H<sub>22</sub>N<sub>4</sub>O  
**Molecular Weight** : 334.423  
**Target** : Potassium Channel  
**Solubility** : 10 mM in DMSO (3.34 mg/mL)



## Biological Activity

VU0468554 (VU 0468554) is a novel potent, selective inhibitor of **GIRK channel** with IC<sub>50</sub> of 0.85 and 2.6 μM for GIRK1/GIRK4 and GIRK1/GIRK2 in cellular assays.

VU0468554 more effectively inhibits the cardiac GIRK channel than the neuronal GIRK channel, inhibits Gβγ-activated GIRK channels in noncompetitive and potentially uncompetitive fashion.

VU0468554 competitively inhibits GIRK-channel activation by ML297, a GIRK-channel activator.

In the isolated heart model, VU0468554 partially reversed carbachol-induced bradycardia in hearts from wild-type mice but not GirK4<sup>-/-</sup> mice.

## References

Allison Anderson, et al. *Mol Pharmacol*. 2021 Dec;100(6):540-547.

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

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