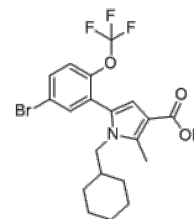


**Product Name** : TPC2-A1-P  
**Cat. No.** : PC-49242  
**CAS No.** : 2804595-86-4  
**Molecular Formula** : C<sub>20</sub>H<sub>21</sub>BrF<sub>3</sub>NO<sub>3</sub>  
**Molecular Weight** : 460.291  
**Target** : Calcium Channel  
**Solubility** : 10 mM in DMSO



## Biological Activity

TPC2-A1-P is a membrane permeable isoform-selective small molecule agonist agonist of two-pore channel 2 (**TPC2**) with EC<sub>50</sub> of 10.5  $\mu$ M in cell-based Ca<sup>2+</sup> signals assays, mediates changes in intracellular calcium in the absence of extracellular calcium.

TPC2-A1-P evokes Na<sup>+</sup> currents in isolated endo-lysosomes with EC<sub>50</sub> of 0.6  $\mu$ M in endo-lysosomal patch-clamp experiments.

TPC2-A1-P but not TPC2-A1-N promoted lysosomal exocytosis.

TPC2-A1-N increases the pH in the lysosomal lumen in a TPC2-dependent manner, TPC2-A1-P has no significant effect on lysosomal pH.

## References

Susanne Gerndt, et al. *Elife*. 2020 Mar 16;9:e54712.

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

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