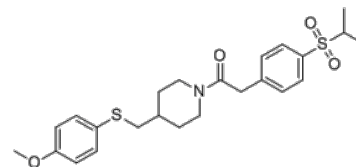


Product Name : VU0546110
Cat. No. : PC-49848
CAS No. : 1421523-00-3
Molecular Formula : C₂₄H₃₁NO₄S₂
Molecular Weight : 461.64
Target : Potassium Channel
Solubility : 10 mM in DMSO



Biological Activity

VU0546110 (VU 0546110) is a potent, selective inhibitor of the sperm-specific potassium channel **SLO3** with IC₅₀ of 1.29 uM, impairs sperm function.

VU0546110 could completely block heterologous SLO3 currents and endogenous K⁺ currents in human sperm.

VU0546110 prevented sperm from hyperpolarizing and undergoing hyperactivated motility and induced acrosome reaction, which are necessary to fertilize an egg.

SLO3 is the sole K⁺ channel responsible for hyperpolarization and significantly contributes to the fertilizing ability of human sperm.

References

Lyon M, et al. *Proc Natl Acad Sci U S A*. 2023 Jan 24;120(4):e2212338120.

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

E-mail: tech@probechem.com