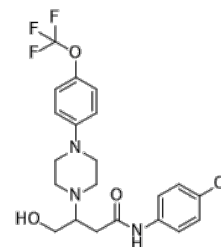


Product Name : VBIT-4
Cat. No. : PC-25198
CAS No. : 2086257-77-2
Molecular Formula : C₂₁H₂₃ClF₃N₃O₃
Molecular Weight : 457.88
Target : VDAC
Solubility : 10 mM in DMSO



CAS: 2086257-77-2

Biological Activity

VBIT-4 is a specific, small molecule inhibitor of VDAC1 oligomerization with IC₅₀ of 1.9 μM, directly interact with purified VDAC1 (MST, K_d=17 μM) and reduces channel activity.

VBIT-4 inhibits Cyto c release from mitochondria and apoptosis in HEK-293 cells with IC₅₀ of 1.8 μM.

VBIT-4 (10 μM) effectively inhibits selenite-induced VDAC1 oligomerization and cell death in HEK-293 cells.

VBIT-4 (20 μM) inhibits VDAC1 oligomerization and apoptosis in neuronal cell SH-SY5Y and Bax/Bak-lacking MEFs cells.

VBIT-4 decreases mtDNA release, IFN signaling, neutrophil extracellular traps, and disease severity in a mouse model of systemic lupus erythematosus.

References

Ben-Hail D, et al. J Biol Chem. 2016 Nov 25;291(48):24986-25003.

Kim J, et al. Science. 2019 Dec 20;366(6472):1531-1536.

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

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