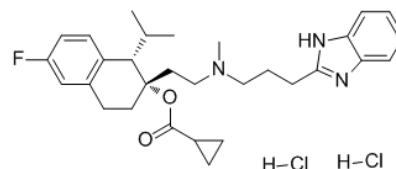


Product Name : NNC 55-0396
Cat. No. : PC-45854
CAS No. : 357400-13-6
Molecular Formula : C₃₀H₄₀Cl₂FN₃O₂
Molecular Weight : 564.5619
Target : Calcium Channel
Solubility : DMSO

1. Huang L, et al. *J Pharmacol Exp Ther*. 2004 Apr;309(1):193-9.
2. Taylor JT, et al. *Cancer Lett*. 2008 Aug 18;267(1):116-24.
3. Kim KH, et al. *J Mol Med (Berl)*. 2015 May;93(5):499-509.
4. Fan Huang, et al. *J Clin Invest*. 2023 Aug 24;e166644.



Biological Activity

NNC 55-0396 is a potent and selective **T-type calcium channel** antagonist that blocks recombinant alpha(1)G T-type channels in human embryonic kidney 293 cells with IC₅₀ of 7 μM.

NNC 55-0396 has no detectable effect on high-voltage-activated channels in INS-1 cells.

NNC 55-0396 inhibits MCF-7 (ERα+) cellular proliferation, inhibits tumor-induced angiogenesis in vitro and in vivo by suppressing HIF-1α stability.

NNC 55-0396 significantly suppresses glioblastoma tumor growth in a xenograft model.

NNC 55-0396 is a small molecule inhibitor of the **PEX3-PEX19 interaction**, effectively disrupts PEX3-PEX19 interaction at 4 μM.

NNC 55-0396 shows anti-tumoral effect, which is dependent on peroxisomal functions, but not on T-type calcium channels (TTCCs).

NNC 55-0396 shows anti-tumor response with MAPK-targeted therapy in melanoma.

References

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

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