

Catalog Number: CM08804

产品信息

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CM08804

CAS号:
1370554-01-0

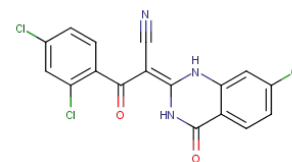
分子式:
C₁₇H₈Cl₃N₃O₂

主要靶点:
ATPase|Hedgehog/Smoothed

主要通路:
G蛋白偶联受体|干细胞|离子通道

分子量:
392.62

溶解度:
DMSO:5 mg/mL (12.73
mM),ultrasonic and warming and
heat to 80°C



体外活性

Ciliobrevin D reversibly inhibits melanosome aggregation, however, the non-cilia-disrupting derivative had no discernible effect at comparable doses. Cells treated with Ciliobrevin D exhibits abnormal (unfocused, multipolar, or collapsed) spindles with disrupted γ -tubulin localization in NIH-3T3 cells. Ciliobrevin D addition also reversibly disrupts the pre-formed spindles of metaphase-arrested cells and reduces overall microtubule levels and it similarly abrogates the movement of peroxisomes in Drosophila S2 cells[1].

体内活性

In the testis in vivo, Knockdown of Dync1h1 or inactivation of dynein 1 by Ciliobrevin D perturbs spermatogenesis. The use of Ciliobrevin D to inactivate dynein 1 in the testis in vivo perturbs MT organization through changes in the spatial expression of EB1, perturbs F-actin organization, and perturbs distribution of adhesion protein complexes at the BTB, leading to a loss of BTB integrity[3].

描述

Ciliobrevin D is a AAA+ ATPase motor cytoplasmic dynein inhibitor. Ciliobrevin D inhibits Hedgehog (Hh) signaling and primary cilia formation and it also inhibits dynein-dependent microtubule gliding and ATPase activity in vitro.

储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years