

Catalog Number: CM03117

产品信息

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CM03117

CAS号:
1227962-62-0

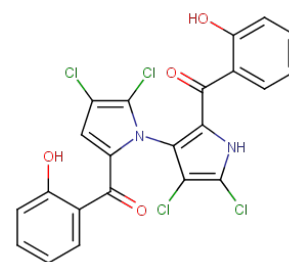
分子式:
 $C_{22}H_{12}Cl_4N_2O_4$

主要靶点:
BCL

主要通路:
凋亡

分子量:
510.15

溶解度:
DMSO:43 mg/mL (84.29 mM)



靶点活性

MCL-1:10.1 μ M

体外活性

Maritoclax (Marinopyrrole A) (3 μ M) induced-cell death is associated with MCL1 decrease and translation inhibition. Maritoclax (Marinopyrrole A) induces a dephosphorylation of EIF4EBP1 concomitant to a decrease of EIF4E phosphorylation[3]. Maritoclax (Marinopyrrole A) is much more effective against Bcl-2-dependent RS4;11 cells (IC₅₀: 2 μ M) when compared to Mcl-1-dependent HeLa cells (IC₅₀: 20 μ M)[4]. Maritoclax (Marinopyrrole A) blocks the binding of Bim BH3 α -helix to Mcl-1 but not Bcl-XL. Maritoclax (Marinopyrrole A) markedly inhibits the viability of Mcl-1-IRES-BimEL cells (EC₅₀=1.6 μ M) with a selectivity greater than 40-fold over Bcl-2-IRES-BimEL (EC₅₀=65.1 μ M) and Bcl-XL-IRES-BimEL (EC₅₀=70.0 μ M) cells. Maritoclax (Marinopyrrole A) induces cell death selectively in Mcl-1-dependent but not Bcl-2- or Bcl-XL-dependent leukemia cells. Maritoclax (Marinopyrrole A) induces proteasome-mediated Mcl-1 degradation without induction of Mcl-1 phosphorylation and Noxa expression. Maritoclax (Marinopyrrole A) inhibits Mcl-1 interaction with Bim in intact cells and triggers cytochrome c release from isolated mitochondria. Maritoclax (Marinopyrrole A) synergistically sensitizes lymphoma/leukemia cells to ABT-737[1]. Maritoclax (Marinopyrrole A) shows activity against all tested *S. aureus* strains, including glycopeptide-intermediate and vancomycin-resistant MRSA, and has potent activities against other Gram-positive organisms. In addition, Maritoclax (Marinopyrrole A) is active against *H. influenzae* but is inactive against other tested Gram-negative strains. Maritoclax (Marinopyrrole A) displays substantial concentration-dependent killing against MRSA strain TCH1516 and is far more rapid in its antibiotic action than either vancomycin or linezolid. Maritoclax exhibits a favorable therapeutic index, with 50% inhibitory concentrations (IC₅₀) in excess of 20 \times above the MIC in each case: 32 to 64 μ g/mL against HeLa cells and 8 to 32 μ g/mL against L929 cells[2].

描述

Maritoclax (Marinopyrrole A) is a novel and specific Mcl-1 inhibitor, shows >8 fold selectivity than BCL-xL (IC₅₀ > 80 μ M), with an IC₅₀ value of 10.1 μ M.

储存

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