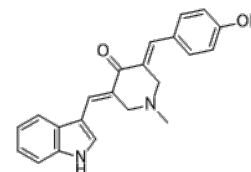


Product Name : CUR5g
Cat. No. : PC-27583
CAS No. : 1370032-20-4
Molecular Formula : C₂₂H₂₀N₂O₂
Molecular Weight : 344.41
Target : Autophagy
Solubility : 10 mM in DMSO



Biological Activity

CUR5g is a novel potent, specific autophagy inhibitor, selectively inhibits autophagosome degradation in cancer cells by blocking autophagosome-lysosome fusion, blocks the recruitment of syntaxin 17 (STX17) to autophagosomes via a UVRAG-dependent mechanism.

CUR5g does not affect the lysosomal pH and proteolytic function, nor does it disturb cytoskeleton.

CUR5g selectively induces autophagosome accumulation in A-549 cancer cells.

CUR5g causes a late-stage block of autophagy by suppressing the fusion of autophagosome with lysosome. blocks incorporation of syntaxin 17 (STX17) on autophagosomes, does not impair the lysosomal proteolytic function and cytoskeleton.

CUR5g inhibits STX17 targeting to autophagosomes by down-regulating UV radiation resistance-associated gene (UVRAG).

CUR5g inhibits proliferation and migration of A549 cells, but does not induce apoptosis or necrosis.

CUR5g exhibits potent synergistic anticancer effects with cisplatin on A549 cells and inhibits autophagic flux in vivo, with no obvious toxicity to normal HUVECs in vitro or mice in vivo.

References

Chen J, et al. Cell Death Discov. 2022 Oct 31;8(1):435.

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

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