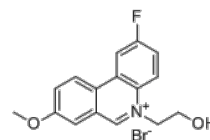


Product Name : SMIP-30
Cat. No. : PC-72527
CAS No. : 2919466-30-9
Molecular Formula : C₁₆H₁₅BrFNO₂
Molecular Weight : 352.203
Target : Protein Phosphatase/PTP
Solubility : 10 mM in DMSO



Biological Activity

SMIP-30 is a potent and selective inhibitor of **PPM1A** with IC₅₀ of 1 uM, selectively inhibits the phosphatase activity of PPM1A.

SMIP-30 shows poor inhibitory activity against closest homolog PPM1B (IC₅₀>30 uM).

SMIP-30 is an uncompetitive inhibitor for PPM1A (K_i=0.84 uM), does not exhibit any cytotoxic effects up to 30 uM in THP-1 macrophages.

SMIP-30 dose-dependently reduces the Mtb burden in infected macrophages, and is well tolerated in vivo and combined with rifampicin reduces Mtb burden in the lungs of infected mice.

SMIP-30 induces LC3B-II expression, activates autophagy in Mtb-infected macrophages in a PPM1A-dependent manner.

SMIP-30 induces a dose-dependent increase in phosphorylation of S403-p62 in WT macrophages.

References

Stefania Berton, et al. *Cell Chem Biol.* 2022 Mar 18;S2451-9456(22)00094-0.

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

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