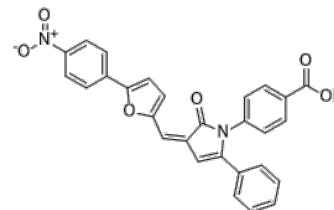


Product Name : 4E1RCat
Cat. No. : PC-25457
CAS No. : 328998-25-0
Molecular Formula : C₂₈H₁₈N₂O₆
Molecular Weight : 478.46
Target : Eukaryotic Initiation Factor (eIF)
Solubility : 10 mM in DMSO



Biological Activity

4E1RCat is a small molecule eIF4E:eIF4GI inhibitor, selectively inhibits cap-dependent translation initiation with IC₅₀ of 4 μM, inhibits eIF4E:eIF4G and eIF4E:4E-BP1 interaction.

4E1RCat is cap-specific, shows no inhibitory effect on 80S complex formation on the GpppG-HCV IRES.

4E1RCat inhibits protein synthesis in vivo in MDA-MB-231 and HeLa cells, but does not significantly affect RNA or DNA synthesis.

4E1RCat (25-50 μM) decreases polysomes, increases the fraction of 80S ribosomal subunits, and decreases levels of Mcl-1 and c-Myc proteins, two eIF4E-dependent mRNAs, in Jurkat cells.

4E1RCat alters chemosensitivity of Pten^{+/}-Eμ-Myc tumors in vivo.

References

Cencic R, et al. Proc Natl Acad Sci U S A. 2011 Jan 18;108(3):1046-51.

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

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