
RS-1

产品编号: D50957

CAS: 312756-74-4

分子式: C₂₀H₁₆Br₂N₂O₃S

纯度: ≥98%

InChi: InChI=1S/C20H16Br2N2O3S/c21-16-7-9-17(10-8-16)24-20(25)15-6-11-18(22)19(12-15)28(26,27)23-13-14-4-2-1-3-5-14/h1-12,23H,13H2,(H,24,25)

InChi Key: SWKAVEUTKGKHSR-UHFFFAOYSA-N

Smiles: O=C(NC1C=CC(Br)=CC=1)C1C=CC(Br)=C(C=1)S(=O)(=O)NCC1C=CC=CC=1

外观: 固体粉末

作用通路: CRISPR/Cas9

溶解性: DMSO up to 100 mM

保存条件: Store in dry, dark place for one year.

产品介绍: RS-1 was previously characterized as a RAD51-Stimulatory compound and now found to be an HDR enhancer to enhance CRISPR/Cas9- and TALEN-mediated knock-in efficiency. It increases the knock-in efficiency by two- to five-fold at different loci, whereas NHEJ inhibitor SCR7 has minimal effects. RS-1 was applied for animal production and have achieved multifold improvement on the knock-in rates as well. RS-1 can stimulate the human homologous recombination protein RAD51 in various conditions. In PC3 prostate cancer cells, RS-1-induced lethality was accompanied by the formation of microscopically visible RAD51 nuclear protein foci occurring in the absence of any DNA-damaging treatment. Treatment with RS-1 promoted significant antitumor responses in a mouse model.