

CRISPR Enhancers

L-755,507

β3 adrenergic receptor agonist that has been shown to increase homology-directed repair efficiency by 2- and 3-fold in CRISPR gene editing.^{1,2}

Product No: 10-4229 5 mg/ 25 mg/

Asunaprevir

Potent HCV NS3 protease inhibitor. Used as part of a repressible Cas9 system (SMASH) capable of degrading newly synthesized Cas9 protein rapidly to precisely control gene editing.^{3,4}

Product No: 10-4928 5 mg/ 25 mg/

AZD7648

Very potent and selective DNA-PK inhibitor. AZD7648 significantly enhances precise CRISPR/Cas9 gene editing alone or in combined treatment with a DNA polymerase theta inhibitor (2iHDR cocktail).^{5,6}

Product No: 10-4108 5 mg/ 25 mg/

XL413-HCl

Cdc7 kinase inhibitor that increases the efficiency of homology directed DNA repair in CRISPR-Cas9 gene editing.⁷

Product No: 10-4414 5 mg/ 25 mg/

NU7441

DNA-PK inhibitor. Reduces the frequency of NHEJ while enhancing the rate of HDR following Cas9-mediated DNA cleavage.⁸

Product No: 10-4810 5 mg/ 25 mg/

RS-1

RAD51 activator that is a potent enhancer of CRISPR- and TALEN- based gene editing.^{9,10}

Product No: 10-4099 10 mg/ 50 mg/

AZD7762

Checkpoint kinase 1/2 inhibitor that enhances CRISPR-Cpf1-mediated precise genome editing.¹¹

Product No: 10-4771 5 mg/ 25 mg/

Trichostatin A

An HDAC inhibitor that decreases global chromatin condensation increasing gene-editing efficiency of iPSCs by 2-4X.¹² Part of the CRISPY mix for increasing precise gene editing.¹³

Product No: 10-2110 1 mg/ 5 mg/

MLN4924

Nedd8-activating enzyme inhibitor that blocks the neddylation of CtlP, which promotes HDR in Cas9- and Cpf1-mediated gene editing. Part of the CRISPY mix for increasing precise gene editing.¹³

Product No: 10-1311 1 mg/ 5 mg/

SCR7 pyrazine

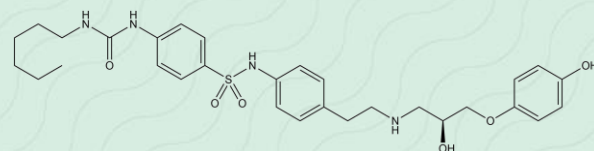
DNA ligase inhibitor that increases the efficiency of HDR for CRISPR-Cas9 gene editing by suppressing the NHEJ DNA repair pathway.^{14,15}

Product No: 10-3652 5 mg/ 25 mg/

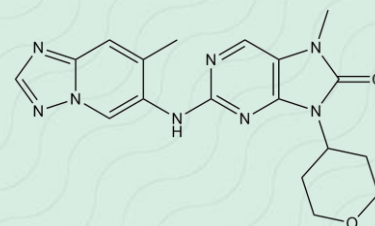
Nocodazole

Microtubule inhibitor led to pronounced increases in Cas9-mediated editing frequencies¹⁶ and increased CRISPR-mediated HDR DNA repair¹⁷.

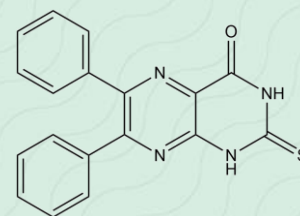
Product No: 10-2387 10 mg/ 50 mg/



L-755,507



AZD7648



SCR7 Pyrazine

REFERENCES

1. Li *et al.* (2017), *Sci. Rep.* **7** 8943
2. Yu *et al.* (2015), *Cell Stem Cell* **16** 142
3. Chung *et al.* (2015), *Nat. Chem. Biol.* **11** 713
4. Wu *et al.* (2020) *Mol. Ther. Nucleic Acids* **19** 922
5. Selvaraj *et al.* (2024), *Nat. Biotech.* **42** 731
6. Wimberger *et al.* (2023), *Nat. Commun.* **14** 4761
7. Wienert *et al.* (2020), *Nat. Commun.* **11** 2109
8. Robert *et al.* (2015), *Genome Med.* **7** 93
9. Pinder *et al.* (2015), *Nucleic Acids Res.* **43** 9379
10. Song *et al.* (2016), *Nat. Commun.* **7** 10548
11. Ma *et al.* (2018), *Nat. Commun.* **9** 1303
12. Molugu *et al.* (2023), *CRISPR J.* **6** 473
13. Riesenber and Maricic (2018), *Nat. Commun.* **9** 2164
14. Maruyama *et al.* (2015), *Nat. Biotechnol.* **33** 538
15. Chu *et al.* (2015), *Nat. Biotechnol.* **33** 543
16. Lin *et al.* (2014), *eLife* **3** e04766
17. Li *et al.* (2023), *Cell Biosci.* **13** 215