RECOMMENDED READING

Publications with Dharmacon™ Edit-R™ CRISPR-Cas9 reagents

Introduction

These publications demonstrate the application of CRISPR-Cas9 genome engineering techniques for target gene knockout or precise knockin using Dharmacon™ Edit-R™ CRISPR-Cas9 reagents or custom RNA synthesis.

2021

1. Bowling, E. A., Wang, J. H., Gong, F., *et al* (2021). Spliceosome-targeted therapies trigger an antiviral immune response in triple-negative breast cancer. *Cell.* **184**(2), 384-403.e21. doi.org/10.1016/j.cell.2020.12.031
2. Chabanon, R. M., Morel, D., Eychenne, T., *et al* (2021). Pbrm1 deficiency confers synthetic lethality to dna repair inhibitors in cancer. *Cancer Research*, **81**(11), 2888–2902. doi.org/10.1158/0008-5472.CAN-21-0628
3. Dutta, R. K., Chinnapaiyan, S., Santiago, M. J., *et al* (2021). Gene-specific MicroRNA antagonism protects against HIV Tat and TGF-β-mediated suppression of CFTR mRNA and function. *Biomedicine & Pharmacotherapy*, **142**, 112090. doi.org/10.1016/j.biopha.2021.112090
4. Gozgit, J. M., Vasbinder, M. M., Abo, R. P., *et al* (2021a). PARP7 negatively regulates the type I interferon response in cancer cells and its inhibition triggers antitumor immunity. *Cancer Cell*, **39**(9), 1214-1226.e10. doi.org/10.1016/j.ccell.2021.06.018
5. Jeusset, L. M., Guppy, B. J., Lichtensztejn, Z., *et al* (2021). Reduced usp22 expression impairs mitotic removal of h2b monoubiquitination, alters chromatin compaction and induces chromosome instability that may promote oncogenesis. *Cancers*, **13**(5), 1043. doi.org/10.3390/cancers13051043
6. Jewett, C. E., Soh, A. W. J., Lin, C. H., *et al* (2021). Rab19 directs cortical remodeling and membrane growth for primary ciliogenesis. *Developmental Cell*, **56**(3), 325-340.e8. doi.org/10.1016/j.devcel.2020.12.003
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8. Mills, C. A., Wang, X., Bhatt, D. P., *et al* (2021). Sirtuin 5 is regulated by the scf cyclin f ubiquitin ligase and is involved in cell cycle control. *Molecular and Cellular Biology*, **41**(2). doi.org/10.1128/MCB.00269-20
9. Yin, X., Riva, L., Pu, Y., *et al* (2021). Mda5 governs the innate immune response to sars-cov-2 in lung epithelial cells. *Cell Reports*, **34**(2), 108628. doi.org/10.1016/j.celrep.2020.108628

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2. E. Kostaras, T. Kaserer, G. Lazaro, *et al.* A systematic molecular and pharmacologic evaluation of AKT inhibitors reveals new insight into their biological activity. *British Journal of Cancer.* (2020).
3. Ishibashi, M., Takahashi, R., Tsubota, A., *et al* (2020). Slamf3-mediated signaling via erk pathway activation promotes aggressive phenotypic behaviors in multiple myeloma. *Molecular Cancer Research*, **18**(4), 632–643. doi.org/10.1158/1541-7786.MCR-19-0391
4. Russell, R., Carnese, P. P., Hennings, T. G., *et al* (2020). Loss of the transcription factor MAFB limits β-cell derivation from human PSCs. *Nature Communications*, **11**(1), 2742. doi.org/10.1038/s41467-020-16550-9
5. Segura-Bayona, S., Villamor-Payà, M., Attolini, C. S.-O., *et al* (2020). Tousled-like kinases suppress innate immune signaling triggered by alternative lengthening of telomeres. *Cell Reports*, **32**(5), 107983. doi.org/10.1016/j.celrep.2020.107983
6. Shimizu, T., Nagane, M., Suzuki, M., *et al* (2020). Tumor hypoxia regulates ganglioside GM3 synthase, which contributes to oxidative stress resistance in malignant melanoma. *Biochimica et Biophysica Acta (BBA) - General Subjects*, **1864**(12), 129723. doi.org/10.1016/j.bbagen.2020.129723
7. Tomizawa, F., Jang, M.-K., Mashima, T., *et al* (2020). C-kit regulates stability of cancer stemness in cd44-positive colorectal cancer cells. *Biochemical and Biophysical Research Communications*, **527**(4), 1014–1020. doi.org/10.1016/j.bbrc.2020.05.024

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9. T. Venit, K. Semesta, S. Farrukh, *et al.* Nuclear myosin 1 activates *p21* gene transcription in response to DNA damage through to DNA damage through a chromatin-based mechanism. *Communications Biology*. **3**(115). (2020). doi: 10.1038/s42003-020-0836-1

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5. A.R. Leenay, A. Aghazadeh, J. Hiatt, *et al.* Large dataset enables prediction of repair after CRISPR-Cas9 editing in primary T cells. *Nature Biotechnology.* (2019). doi: 10.1038/s41587-019-0203-2
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7. J. Iwasaki, T. Komori, F. Nakagawa, *et al.* Schlafen11 expression is associated with the antitumor activity of trabectedin in human sarcoma cell lines. *Anticancer Research*. **39**:3553-3563 (2019). doi: 10.21873/anticanres.13501
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15. F. Fekri, J. Abousawan, *et al.* Targeted enhancement of flotillin-dependent endocytosis augments cellular uptake and impact of cytotoxic drugs. *BioRxiv*. doi: 10.1038/s41598-019-54062-9
16. P. Palmbos, Y. Wang, *et al.* ATDC Mediates a TP63-regulated Basal Cancer Invasive Program. *Oncogene*. **38**, 3340-3354 (2019). doi: 10.1038/s41388-018-0646-9
17. C. Buffone, J. Kutzner, *et al.* The Ability of SAMHD1 to block HIV-1 but not SIV requires expression of MxB. *Virology*. **531**, 260-268 (2019). doi: 10.1016/j.virol.2019.03.018

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