

## Alt-R® CRISPR-Cas9 crRNA Libraries

Alt-R CRISPR-Cas9 crRNA Libraries are collections of arrayed crRNAs predesigned using the trusted IDT crRNA design algorithm and manufactured using processes that are the basis of the market-leading Alt-R CRISPR-Cas9 System (Figure 1). Convenient sizes (2 nmol, 5 nmol, or custom) are available.



### benefits

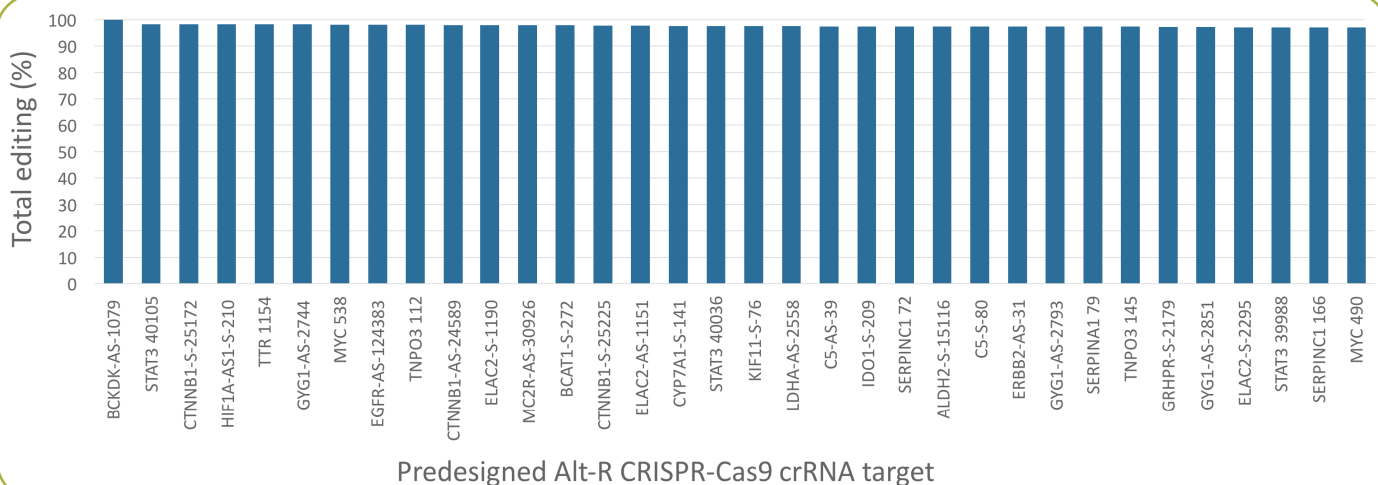
**Obtain maximal genome editing** in Cas9-expressing cell lines or when delivered as ribonucleoproteins (RNP) in primary cells

**Increase screening reliability** with predesigned, chemically modified guide RNAs that ensure enhanced nuclease resistance and reduced off-target risks

**Accommodate your cell type requirements** with delivery by lipofection or electroporation as RNP or guide RNA

**Meet your laboratory needs** with 96- or 384-well plate formats

Request more information at  
[www.idtdna.com/customCRISPR](http://www.idtdna.com/customCRISPR)



**Figure 1. High on-target editing rates (typically, >90%) are achieved with the Alt-R CRISPR-Cas9 System.** Predesigned Alt-R CRISPR-Cas9 crRNAs were duplexed with Alt-R CRISPR-Cas9 tracrRNA, and 30 nM of the resulting duplexed guide RNA was introduced by lipofection into HEK-293 cells that stably express *S. pyogenes* Cas9. To assess editing efficiency, genomic DNA samples were harvested 48 hr after lipofection and tested using targeted next generation sequencing. Amplicons were run on a MiSeq® system (Illumina), and sequencing data were analyzed using proprietary IDT data processing software.

## Fixed-content libraries targeting commonly studied gene sets

Each gene is targeted by 4 unique, predesigned crRNAs arrayed in individual wells of the plates. Here are some examples:

Library	# crRNAs	# genes
Human kinome	3292	823
Human epigenome	2268	567
Human druggable genome	~32,000	~8000

Contact your local sales representative or email [CRISPR@idtdna.com](mailto:CRISPR@idtdna.com) for information about pricing and additional library sets.

## Custom libraries

IDT can build custom CRISPR-Cas9 crRNA libraries for you with predesigned crRNAs that you select or with crRNAs of your own design.

Do you have questions about your custom CRISPR library project? Contact our team of CRISPR library experts at [www.idtdna.com/customCRISPR](http://www.idtdna.com/customCRISPR) for assistance with experiment planning and design specifications, such as:

- Reagent requirements (e.g., crRNA, tracrRNA, Cas9 nuclease)
- Library format optimization
- Library preparation and usage
- RNP or guide RNA delivery
- Recommendations for screening and editing analysis

Learn more about the Alt-R CRISPR-Cas9 System at [www.idtdna.com/CRISPR-Cas9](http://www.idtdna.com/CRISPR-Cas9).

**For Research Use Only. Not for use in diagnostic procedures.**

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