Alt-R CRISPR-Cas9 sgRNAs

Chemically synthesized and modified single guide RNAs for outstanding CRISPR performance and quality

Alt-R CRISPR-Cas9 single guide RNAs (sgRNAs) comprise both crRNA and tracrRNA sequences within a single molecule. Outstanding editing performance is observed at >95% of sites in Jurkat cells (Figure 1). Alt-R Cas9 sgRNAs are ideal for challenging conditions such as high nuclease environments or when co-delivered with Cas9 mRNA. They contain chemical modifications that provide increased stability, potency, and resistance against nuclease activity (Figure 2).

Customizable sgRNAs to fit every project and every budget

Available in a wide range of deliverable sizes, Alt-R Cas9 sgRNAs can be customized to suit small and large experiments. They are available in tube or plate format in a variety of scales from 2 nmols and up. Further options for custom chemical modifications, additional purification, and custom formulation provide unparalleled flexibility to meet your experimental needs.

benefits

sgRNAs in days, not weeks, with fast synthesis time (3–5 business days*)

Guaranteed performance with predesigned sgRNAs

Custom features to meet your needs, such as a variety of deliverable sizes, chemical modifications, and purification

Trusted quality and manufacturing delivering optimized synthesis and purification to mitigate oligo cross-contamination risk

Discover more at
www.idtdna.com/CRISPR-Cas9

* 3–5 business days for most standard requests. Custom requests may require additional manufacturing time.

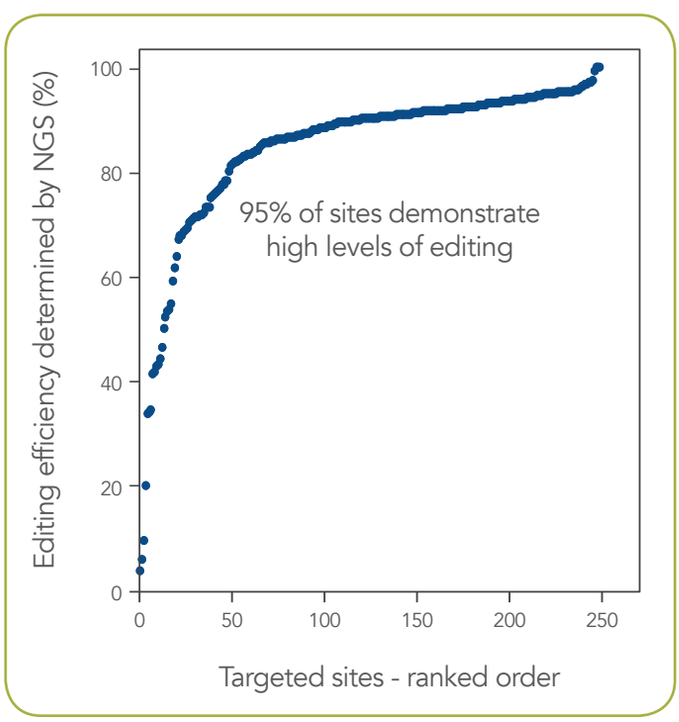

Figure 1. Alt-R CRISPR-Cas9 sgRNAs provide remarkable editing potency in Jurkat cells. Ribonucleoprotein (RNP) complexes were formed with Alt-R S.p. WT Cas9 Nuclease V3, combined with Alt-R Cas9 sgRNAs synthesized for 255 randomly selected Cas9 guide RNA sites across the human genome. RNP complexes (4 µM) were delivered into Jurkat cells (human T-lymphocyte-derived cancer cells) via a Nucleofector™ system (Lonza) in the presence of Alt-R Cas9 Electroporation Enhancer. Genome editing efficiencies were determined by target amplification followed by next-generation sequencing on an Illumina instrument.

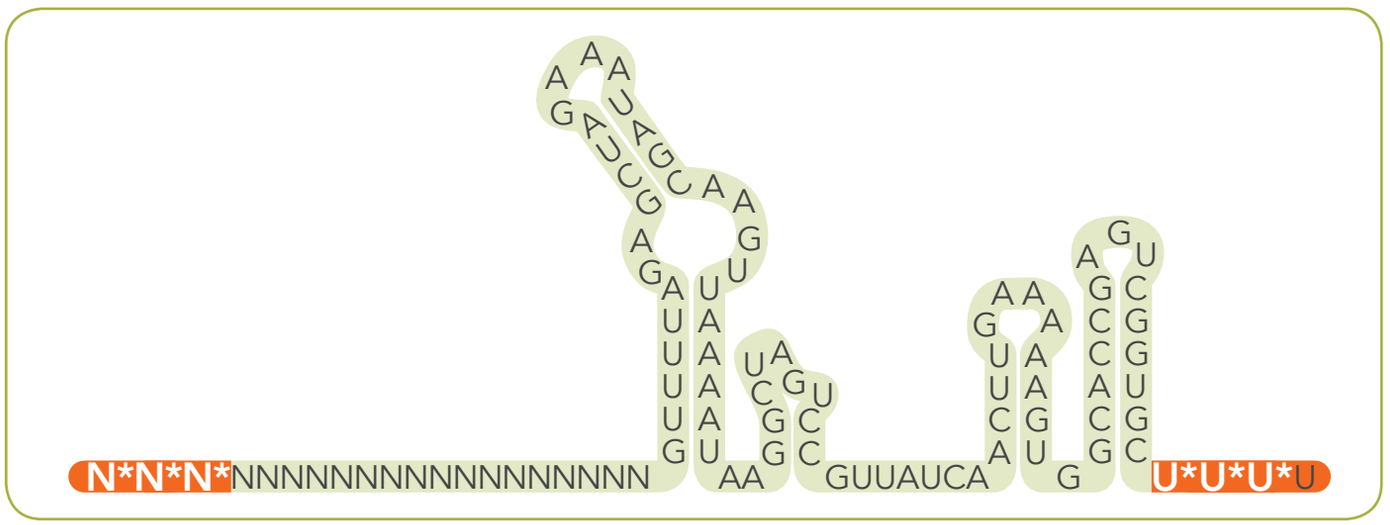

Figure 2. Alt-R CRISPR-Cas9 sgRNA structure diagram. Chemical modifications on Alt-R CRISPR-Cas9 sgRNAs increase their stability, potency, and resistance against nuclease activity. Nucleotides shown in bold white are 2'OMe bases, and the asterisks indicate phosphorothioate linkages.

Ordering information

Product	Size	How to order
Alt-R CRISPR-Cas9 sgRNA, in tubes or plates	2 nmol 10 nmol 50 nmol 100 nmol	Go to: **www.idtdna.com/CRISPR-Cas9**
	Larger scales available	Email: **CRISPR@idtdna.com**

For more information, visit **www.idtdna.com/CRISPR-Cas9**

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

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