


Can I find information about vendor provided off-target scores?

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Some vendors score gRNA sequences for off-target effects – we show that score when we can

As with other nucleotide-targeted experimental methods (e.g. RNAi), off-target effects are a valid concern when designing a research project. Off-target effects can arise from complementarity of the gRNA sequence with other parts of the genome (particularly in the gRNA seed region), leading to undesired effects on the genome and protein expression. Some vendors on Selector score their gRNAs based on various criteria and we have included those scores on *product pages* when possible. Three such vendors are *Thermo Fisher Scientific*, *Sigma Aldrich*, and *Integrated DNA Technologies*. [Check out this article to learn more about calculated off-target and on-target scores on the platform.](#)

Thermo Fisher Scientific – *Thermo Fisher* scores gRNA out of 100 based on predicted binding efficiencies and other sequence factors.

PRODUCT SPECS 	
Target	CIB3, KIP 3 +4 more
Target Species	Human
Cas Compatibility	Cas9
Sequence	CTCGTAGGGCACCTTCACAT
Strand	Forward
PAM	CGG
Chr Location	Chr.19: 16161368 - 16173525 on GRCh38
Target Location	Exon 3
Score	96.182/100
Brand	TrueGuide™

Sigma Aldrich –gRNA are given two scores out of 100: an Efficiency score based on work published by Doench, Fusi *et al*/(2016), and a Specificity score based on Hsu *et al*/(2013).

Target	TEX12, TESTIS-EXPRESSED SEQUENCE 12 PROTEIN VARIANT 1 +2 more
Target Species	Human
Cas Compatibility	Cas9
Sequence	TTCCAAGAGAGGACAGCTG
Strand	Reverse
PAM	TGG
Chr Location	Chr.11: 112170437
Target Location	Exon 3
Score	Efficiency: 63.55, Specificity: 82.77
Brand	MISSION®

Integrated DNA Technologies – gRNA are given two scores out of 100: an On-Target score based on the predicted editing performance at the gene of interest, and an Off-Target score where a higher value indicates a lower likelihood of off-target effects.

Target	OR52K1, OLFACTORY RECEPTOR +2 more
Target Species	Human
Cas Compatibility	Cas9
Sequence	CATGTTGGCAACCATTGACT
Strand	Forward
PAM	TGG
Chr Location	4489097
Score	On-target: 88, Off-target: 39
Brand	Alt-R®
Size	2 nmol, 10 nmol, 50 nmol, 100 nmol