



Cas9 variants	gRNAs with additional 5'G (gN20/GN20)			gRNAs without additional 5'G (GN19)	
	On-target activity by T7E1 assay (GN20)	On-target activity by T7E1 assay (gN20)	On-to-off target ratio by GUIDE-Seq (gN20)	On-target activity by T7E1 assay	On-to-off target ratio by GUIDE-Seq
WT SpCas9	100.0	100.0	52.6	100.0	35.6
Opti-SpCas9	95.9	95.1	93.7	109.1	73.8
OptiHF-SpCas9	65.2	26.1	99.4	59.6	90.6
Sniper-Cas9	48.0	38.8	96.3	38.2	64.2
evoCas9	40.5	0.0	n.d.	14.4	100.0
HypaCas9	32.2	24.0	n.d.	106.8	95.5
eSpCas9(1.1)	14.2	39.7	n.d.	103.4	99.9

Table 2: Comparison of the accuracy and efficiency of SpCas9 variants.

圖表二: 比較不同SpCas9變體的準確性和效率。