



Engineered SpCas9 variant(s)	Publication	Screening host	Functional characterization of SpCas9 variants with defined genotypes
eSpCas9(1.1)	<i>Slaymaker et al., Science, 2016</i>	Human cells (U2OS)	65
SpCas9-HF1	<i>Kleinstiver et al., Nature, 2016</i>	Human cells (HEK293T)	15
HypaCas9	<i>Chen et al., Nature, 2017</i>	Human cells (U2OS)	36
evoCas9	<i>Casini et al., Nature Biotechnology, 2018</i>	Yeast	37
xCas9(3.7), xCas9(3.6)	<i>Hu et al., Nature, 2018</i>	E.coli.	2
Sniper-Cas9	<i>Lee et al., Nature Communications, 2018</i>	E.coli.	19
Opti-SpCas9, OptiHF-SpCas9	<i>Choi et al., Nature Methods, 2019</i>	Human cells (OVCAR8-ADR)	948

Table 1: List of SpCas9 variants that were generated and tested.

圖表一: 迄今所被報導的SpCas9變體總覽。