

saCas9 Nuclease Enzyme

saCas9 Nuclease Protein

CATALOG #
AAA214197

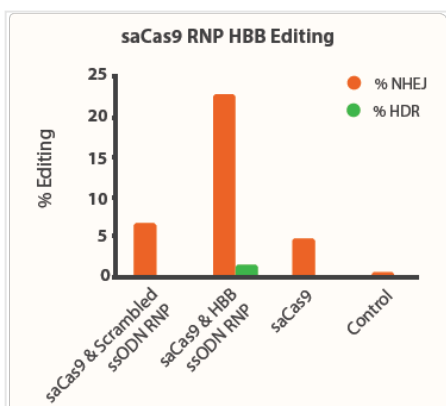
PRODUCT SYNONYMS

saCas9 Nuclease; saCas9 Nuclease Protein; saCas9 Nuclease enzyme

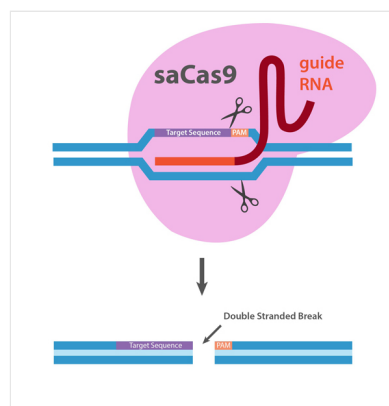
PRODUCT SPECIFICATIONS

Storage Buffer	10 mM Tris-HCl (pH 7.4), 0.1 mM EDTA, 1 mM DTT, 300 mM NaCl, and 50% (v/v) Glycerol.
Preparation and Storage	Store all components at -20 degree C.

IMAGES



Application Data



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ADDITIONAL INFORMATION

Related Product Information for saCas9 Nuclease enzyme

The Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) /Cas9 system is the latest RNA-guided endonuclease tool in genome editing which allows for very specific genomic disruption and replacement. The Cas9 nuclease serves to unwind the genomic DNA duplex next to conserved protospacer adjacent motifs (PAMs) and homes in on its target sequence, which is recognized by a complementary single-guide RNA. The resulting double-stranded break gets repaired by the non-homologous end joining (NHEJ) pathway, leading to a disruption in the open reading frame of the targeted gene. Alternatively, by supplying a suitable repair template, virtually any desired point mutation can be introduced at the break point via homology-directed repair (HDR). The Cas9 nuclease from the bacteria *Staphylococcus aureus*, abbreviated saCas9, is gaining popularity as an alternative to spCas9 due to its relatively smaller size. The saCas9 PAM sequence is 5'-NNGRRN (preferably 5'-NNGRRT).

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.