

Recombinant Streptococcus pyogenes Cas9-GFP Protein

Cat. No. Cas9-16S **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Streptococcus pyogenes Cas9-GFP Protein, fused with enhanced GFP was expressed in E. coli, 3X NLS. Highly specific Highly active Ready-to-inject/transfect
Species	Streptococcus pyogenes
Source	E.coli
Description	CRISPR/Cas systems are employed by bacteria and archaea as a defense against invading viruses and plasmids. Recently, the type II CRISPR/Cas system from the bacterium Streptococcus pyogenes has been engineered to function in eukaryotic systems using two molecular components: a single Cas9 protein and a non-coding guide RNA (gRNA). The Cas9 endonuclease can be programmed with a gRNA, directing a DNA double-strand break (DSB) at a desired genomic location. Similar to DSBs induced by zinc finger nucleases (ZFNs), the cell then activates endogenous DNA repair processes, either non-homologous end joining (NHEJ) or homology-directed repair (HDR), to heal the targeted DSB.
Form	Lyophilized powder
Molecular Mass	~194 kDa
Purity	≥ 90% (SDS-PAGE)

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Applications	Functional Genomics Target Validation Genome Editing Fluorescence Microscopy Flow Cytometry
Storage	At -20 centigrade.
Reconstitution	Lyophilized <i>S. pyogenes</i> Cas9-GFP protein should be resuspended in the Reconstitution solution provided to desired concentration. Gently tap tube to completely dissolve lyophilized powder, incubate for 10 minutes on ice, and spin tube to bring material to bottom of tube.
Shipping	Wet ice
GENE INFORMATION	
Official Symbol	Cas9
Synonyms	Cas9-EGFP, SpCas9-EGFP, SpCas9-GFP

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