Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Cas9 Null Mutant NLS Protein

Catalog No: tcbp1056

Available Sizes

Size: 40µg

Specifications

Form:
Enzyme supplied with 10X Reaction Buffer

Storage Buffer:
10 mM Tris-HCl (pH 7.4), 0.1 mM EDTA, 1 mM DTT, 300 mM NaCl, and 50% (v/v) Glycerol.

Concentration:
10 µM, 1.60 mg/ml

Source:
E. coli

Storage Instruction:
Store all components at -20°C.

Alternative Names:
dCas9, Cas9d, spCas9d, Dead Cas9, Cas9 Double Mutant, Nuclease-deficient Cas9, CRISPR-associated endonuclease dCas9 from Streptococcus pyogenes

Product Description

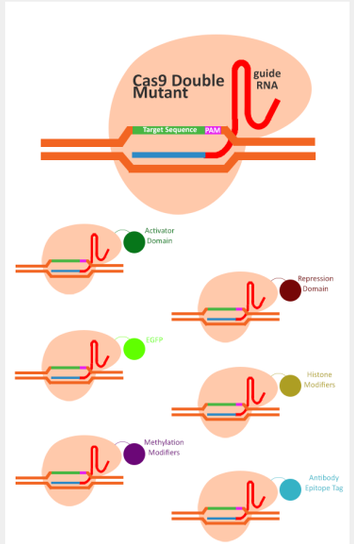
The Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)/Cas9 system is the latest RNA-guided, endonuclease tool in genome editing which allows for very specific genomic disruption and replacement. The Cas9 Null Mutant Protein is created by mutating both cleavage domains of the wild type Cas9 (D10A and H840A). Such a Cas9 protein retains its ability to bind to genomic DNA through gRNA:genomic DNA base pairing, however, unlike Cas9 Nuclease and Cas9 Nickase, where permanent gene disruption can be achieved, the Cas9 Null Mutant does not introduce any genome modifications. Therefore, this protein can provide a useful negative control for CRISPR experiments. In addition, binding of the Null Mutant can act as a roadblock to hinder transcription, thus offering a useful tool to achieve reversible knock-down of gene expression. The Cas9 nuclease from the bacteria Streptococcus pyogenes, abbreviated spCas9, is the most commonly used Cas9 variant. The reason for spCas9 popularity is two-fold. First the spCas9 PAM sequence is 5’-NGG, which is highly abundant in the genome allowing virtually any gene to be targeted. The spCas9 enzyme also has on average a higher efficiency in vivo compared to other variants. Cas9 Null Mutant NLS contains a SV40 T antigen

Copyright 2021 Taiclone Biotech Corp.

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

nuclear localization sequence (NLS) on the C-terminus of the protein.

Note: this product is 40ug (250pmol) volume 25ul



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!

Copyright 2021 Taiclone Biotech Corp.