NLS-Cas9-NLS Nuclease

Summary

Catalog No.	YXX08407
Alternative Names	NLS-Cas9 Nuclease, Cas9, SpCas9, SpyCas9, CRISPR-associated endonuclease Cas9/Csn1
Form	Liquid
Purity	>90% as determined by SDS-PAGE.
Applications	1) Non-viral vector CRISPR gene knockout based on protein-sgRNA transfection. 2) Non-viral vector CRISPR gene knock-in based on protein transfection with sgRNA. 3) The DNA efficiency detection of sgRNA shearing target site reduces the cost of in vivo screening. 4) Specific sites of cleaved target DNA in vitro.
Endotoxin level	Please contact with the lab for this information.
Expression system	E. coli
Protein length	NLS-Cas9-NLS is produced by expression in an E. coli strain carrying a plasmid encoding the Cas9 gene from Streptococcus pyogenes with a double-ends nuclear localization signal (NLS).
Nature	Recombinant
Predicted molecular weight	163 kDa
Stability and Storage	Store at -20 ℃ for twelve months from the date of receipt.
Species	Streptococcus pyogenes
Shipping	In general, proteins are provided as lyophilized powder/frozen liquid. They are shipped out with dry ice/blue ice unless customers require otherwise.

Note For research use only.

Description

NLS-Cas9 Nuclease is the recombinant Streptococcus pyogenes Cas9 protein with a nucleic localization signal (NLS) on both N and C terminal, which can be used for genome editing by inducing site-specific DNA double stranded breaks. The Cas9 protein forms a highly stable ribonucleoprotein (RNP) complex with guide RNA (sgRNA). When equipped with the NLS sequence, the Cas9-RNP complex can promptly localize to the nucleus upon cell entry, eliminating the need for in vivo transcription or translation.

Data Image