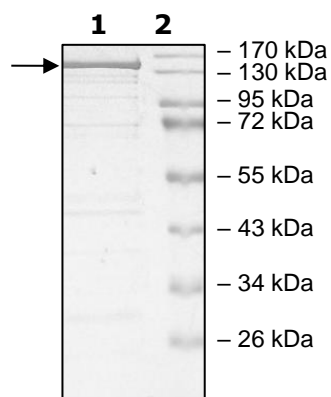


## Product Information

<b>Description:</b>	Recombinant <i>S. pyogenes</i> SpCas9-NLS (conserved hypothetical protein), full length. This construct contains a C-terminal His-Tag. SpCas9-NLS contains a nuclear localization sequence for optimal activity.
<b>Species:</b>	<i>Streptococcus pyogenes</i>
<b>Construct:</b>	Cas9 (Full Length-NLS-His) ( <i>S. pyogenes</i> )
<b>Concentration:</b>	0.1 mg/ml
<b>Expression System:</b>	<i>E. coli</i>
<b>Purity:</b>	70%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	50 mM sodium phosphate, pH 7.5, 300 mM NaCl, 1 mM DTT, 150 mM imidazole, and 10% glycerol
<b>MW:</b>	160 kDa
<b>Genbank Accession:</b>	AAK33936
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
<b>Assay Conditions:</b>	Cas9 activity was measured using DNA Cleavage assay. Active Cas9 enzyme, sgRNA or tracrRNA/crRNA, 5 µl of 4X Cas9 reaction buffer (200 mM Tris-HCl, pH 7.9, 400 mM MgCl <sub>2</sub> , and 0.4 mg/ml Prionex (w/v 0.04%)) and nuclease-free water were combined to a final reaction volume of 20 µl. The reaction was then incubated at room temperature for 20-60 minutes, followed by the addition of 20-500 ng of target DNA to the Cas9-gRNA complex to initiate the reaction. A subsequent incubation at 37°C for 10-30 minutes. Cleavage of target DNA was confirmed by running a DNA agarose gel.
<b>Applications:</b>	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

## Quality Control Data

4-20% SDS-PAGE Coomassie Staining



Activity

