# NLS-Cas12a Nuclease (MALS verified)

Catalog # CAA-L5149



#### Features

With two NLS, which leads to transport to the nucleus efficiently. High cleavage activity

#### **Product Details**

NLS-Cas12a Nuclease is a recombinant Lachnospiraceae bacterium Cas12 protein purified from Escherichia coli for CRISPR-based genome editing. The introduction of nuclear localization signals (NLS) can help Cas12 enter the nucleus, increasing the chance of genomic DNA cleavage.

# Application

Developed as a variety of genome editing tools, such as transcription regulation, gene recombination, and base editing.

# Concentration

2.5 μg/μL

# Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

# Sterility

Negative

#### Endotoxin

Less than 0.01 EU per  $\mu$ g by the LAL method.

#### Formulation

Supplied as 0.2  $\mu$ m filtered solution in 20 mM NaAC, 500 mM NaCl, pH6.0 with glycerol as protectant.

Contact us for customized product form or formulation.

#### Shipping

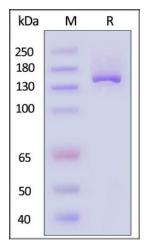
*This product is supplied and shipped with dry ice, please inquire the shipping cost.* 

#### Storage

This product is stable after storage at:

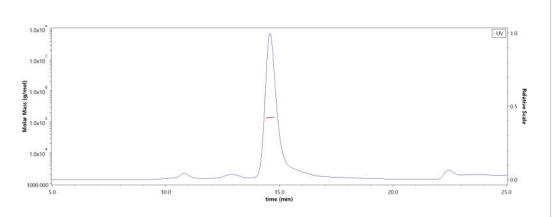
- The product MUST be stored at -20°C or lower upon receipt;
- -20°C for 3 months under sterile conditions.

# **SDS-PAGE**



The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# SEC-MALS



The purity of NLS-Cas12a Nuclease (Cat. No. CAA-L5149) is more than 90% and the molecular weight of this protein is around 135-165 kDa verified by SEC-MALS. Report

# **Bioactivity**

Measured by its ability to cleave a targeted DNA substrate. Cas12a achieves >90% substrate cleavage (QC tested).

**Clinical and Translational Updates** 

