NLS-Cas12a Nuclease (MALS verified)

Catalog # CAA-L5149

Synonym
CRISPR-associated endonuclease Cas12a, CRISPR-associated endonuclease Cpf1, cas12a, Cpf1

Source
NLS-Cas12a Nuclease (CAA-L5149) is expressed from E. coli cells. It contains AA Ser 2 - His 1228 (Accession # A0A5S8WF58).
Predicted N-terminus: Met 1

Molecular Characterization
The protein has a calculated MW of 147.6 kDa. The protein migrates as 130-140 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE). This protein has two NLS, which leads to transport to the nucleus efficiently. It is ideal for in vitro and in vivo reactions.

Endotoxin
Less than 0.01 EU per μg by the LAL method.

Sterility
The sterility testing was performed by membrane filtration method.

Concentration
2.5μg/μL

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM NaAC, 500 mM NaCl, 0.1 mM EDTA, 0.1 mM TCEP, pH6.0 with Glycerol as protectant.
Contact us for customized product form or formulation.

Shipping

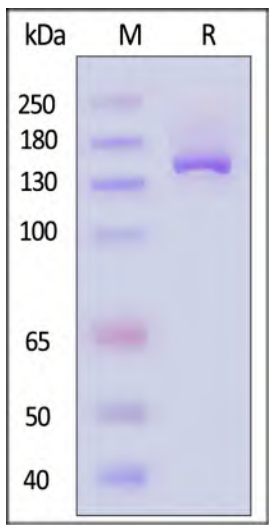
This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.

Storage

Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

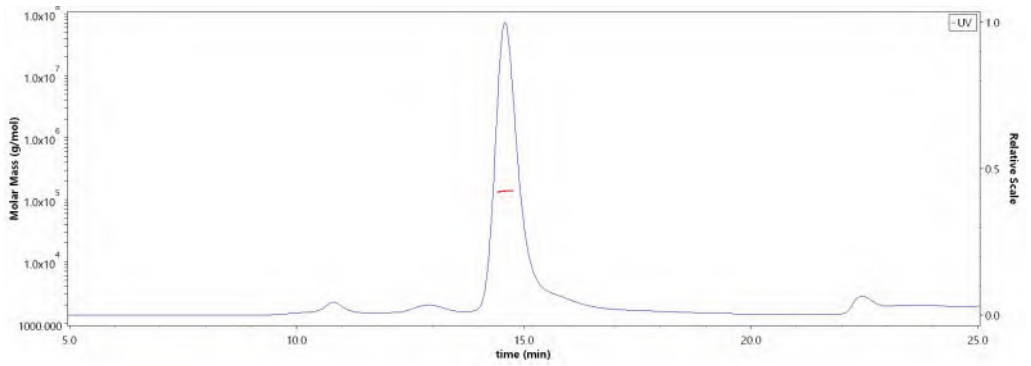
- The product MUST be stored at -20°C or lower upon receipt;
- -20°C for 3 months under sterile conditions.

SDS-PAGE



NLS-Cas12a Nuclease on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.