

Cas12 (LbCpf1) Recombinant Protein | Cas12 recombinant protein

Cas12 (LbCpf1), Active

CATALOG #
AAA73309

HOST
E Coli

PRODUCT SYNONYMS

Cas12 (LbCpf1); Active; Cpf1 (synthetic construct); Cas12 recombinant protein

PRODUCT SPECIFICATIONS

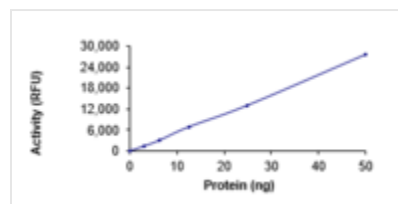
Host	E Coli
Form/Format	Recombinant protein stored in 50mM Tris-HCl, pH7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 1mM DTT, 10% glycerol.
Tag	GST
Species	Lachnospiraceae
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



SDS-PAGE

Purity: Sample purity data. For lot-specific data, please refer to the lot-specific datasheet.



Activity

Activity: Sample activity data. for lot-specific data, please refer to the lot-specific datasheet.

ADDITIONAL INFORMATION

Related Product Information for Cas12 recombinant protein	Recombinant Lachnospiraceae Cas12 (LbCpf1)(1-1227) was expressed in E Coli with a N -terminal GST tag. The protein accession number is ATB19154. CRISPR (clustered regularly interspaced short palindromic repeat) and their CRISPR-associated (Cas) proteins constitute the adaptive immune system in bacteria (1-2). This system has been redesigned to create an exemplary genome editing tool for application to RNA-based therapeutics development (3). Developing rapid and sensitive test tools is key for successful patient management and curbing the disease spread. Several CRISPR-Cas12 based SARS-CoV-2 detection assays have been developed (4,5). CRISPR/Cas12 (LbCpf1) is a Cas12 synthetic construct derived from Lachnospiraceae bacterium.
Product Categories/Family for Cas12 recombinant protein	COVID-19 Proteins; Cardiovascular Disease; Cell Cycle; COVID19; Gastrointestinal Diseases; Infectious Diseases; Inflammation; Invasion/Metastasis; Lung Diseases; Metabolic Disorder; Neurobiology; severe acute respiratory syndrome coronavirus 2

References

1. Horvath, P., et al. CRISPR/Cas, the immune system of bacteria and archaea. Science, 327(5962):167-170.
2. Morange, M. What history tells us XXXVII. CRISPR-Cas: The discovery of an immune system in prokaryotes. J. Biosci. 40(2):221-223.
3. Gier, R.A., et al. High-performance CRISPR-Cas12a genome editing for combinatorial genetic screening. Nat. Commun. 2020, 11(1):1-9.
4. Broughton JP, et al: Rapid detection of 2019 novel coronavirus SARS-CoV-2 using a CRISPR-based DETECTR lateral flow assay. medRxiv doi: <https://doi.org/10.1101/2020.03.06.20032334>.
5. Lucia C, et al: An ultrasensitive, rapid, and portable coronavirus SARS-CoV-2 sequence detection method based on CRISPR-Cas12. bioRxiv. doi: <https://doi.org/10.1101/2020.02.29.971127>.

NCBI AND UNIPROT INFORMATION

Molecular Weight

150kDa (calculated ~164kDa)

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/cas12-lbcpf1-recombinant-protein-e-coli/73309>