

Cas13a (LwC2c2) Recombinant Protein | Cas13a recombinant protein

Cas13a (LwC2c2), Active

CATALOG #
AAA73387

HOST
E Coli

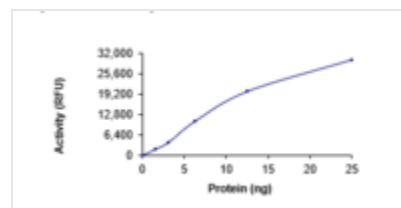
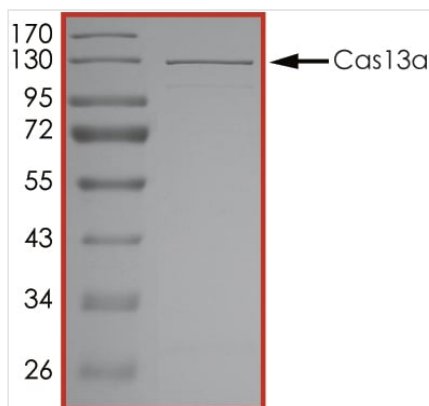
PRODUCT SYNONYMS

Cas13a (LwC2c2); Active; LwCas13a; LwaCas13a; LwC2c2; EndoRNase; CRISPR-associated endoribonuclease Cas13a; Cas13a recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Form/Format	Recombinant protein stored in 50mM sodium phosphate, pH8.0, 300mM NaCl, 150mM imidazole, 1mM DTT, 10% glycerol.
Tag	HIS
Species	Leptotrichia wadei
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



Activity

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

SDS-PAGE

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

ADDITIONAL INFORMATION

Related Product Information for Cas13a recombinant protein

Recombinant *Leptotrichia wadei* Cas13a (LwC2c2)(1-1152) was expressed in E Coli with a C-terminal His tag. The protein accession number is WP_021746774.

Cas13a is RNA-guided RNA endonuclease that belongs to class 2 type VI CRISPR-Cas system (1). Cas13a possess both RNA recognition and cleavage activities and cleaves RNA through conserved basic residues within its two HEPN domains (2). Interestingly, activated Cas13a induces collateral cleavage of nearby non-targeted RNAs in a nonspecific manner. This property of Cas13a enzyme has been leveraged for the development of sensitive and robust nucleic acid detection test tool for clinical samples. tests using Cas13a for detection of SARS-CoV-2 offers promising alternative to quantitative PCR (3). In addition, CRISPR-Cas13a system provides opportunity for the development of clinical research in precision oncology (4).

Product Categories/Family for Cas13a recombinant protein	COVID-19 Proteins; Acute Respiratory Distress Syndrome; Cardiovascular Disease; Cellular Stress; COVID19; Gastrointestinal Diseases; Infectious Diseases; Inflammation; Lung Diseases; Metabolic Disorder; Neurobiology; severe acute respiratory syndrome coro
References	1. East-Seletsky A, et al: Two distinct RNase activities of CRISPR-C2c2 enable guide-RNA processing and RNA detection. Nature. 2016, 538:270-3. 2. Abudayyeh O, et al: C2c2 is a single-component programmable RNA-guided RNA-targeting CRISPR effector. Science. 2016, 353:5573. 3. Patchsung, M, et al: Clinical validation of a Cas13-based assay for the detection of SARS-CoV-2 RNA. Nat Biomed Eng. 2020. https://doi.org/10.1038/s41551-020-00603-x. 4. Zhang J, You Y. CRISPR-Cas13a system: A novel approach to precision oncology. Cancer Biol Med. 2020, 17(1):6-8.

NCBI AND UNIPROT INFORMATION

Molecular Weight	approx. MW: 130kDa
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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/cas13a-lwc2c2-recombinant-protein-e-coli/73387>