

LbuCas13a recombinant protein

LbuCas13a, Active

CATALOG #
AAA73388

HOST
E Coli

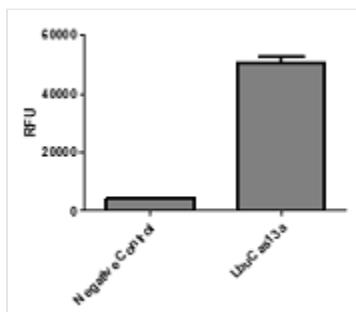
PRODUCT SYNONYMS

LbuCas13a; Active; LbuCas13a recombinant protein

PRODUCT SPECIFICATIONS

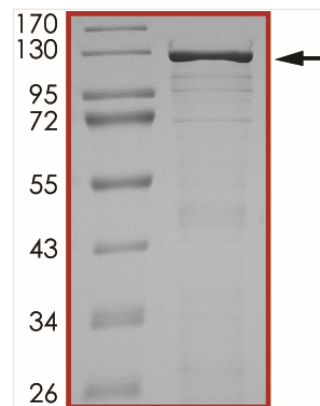
Host	E Coli
Form/Format	Recombinant protein stored in 50mM sodium phosphate, pH7.5, 300mM NaCl, 1mM DTT, 10% glycerol.
Tag	Tag-free
Species	Leptotrichia buccalis
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store 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



Bioactivity

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



SDS-PAGE

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

ADDITIONAL INFORMATION

Related Product Information for LbuCas13a recombinant protein

Recombinant tag-free *Leptotrichia buccalis* LbuCas13a was expressed in E Coli cells. The protein accession number is WP_015770004.

Cas13a is an RNA-guided RNA endonuclease that belongs to the class 2 type VI CRISPR-Cas system (1). Cas13a possesses 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 (3). Engineered LbuCas13a shows stability and altered cleavage activity in vitro and possesses the capability of robust exon skipping in human cells (4).

Product Categories/Family for LbuCas13a recombinant protein

[CRISPR Associated Proteins](#)

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. Charles E, et al: Engineering improved Cas13 effectors for targeted post-transcriptional regulation of gene expression. bioRxiv. doi: <https://doi.org/10.1101/2021.05.26.445687>.

NCBI AND UNIPROT INFORMATION

Molecular Weight

132kDa

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/lbucas13a-recombinant-protein-e-coli/73388>