diagenode
A Hologic Company

TECHNICAL DATASHEET

LwaCas13a monoclonal antibody

Cat. No. C15100149

Type: Monoclonal	Specificity: Leptotrichia wadei
Size: 100 µl	Isotype: NA
Concentration: Not determined	Host: Mouse
Lot No.: 001	Purity: Concentrated cell culture supernatant.
Storage buffer: TBS containing 0.02 % Na-azide.	Storage conditions: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.	

Last Data Sheet Update: January 13, 2020

Description

Monoclonal antibody raised in mouse against the Cas13a protein from Leptotrichia wadei. (CRISPR associated protein 13, Jennifer Doudna form) using a recombinant protein containing the N-terminus of the protein.

Applications

Applications	Suggested dilution	References
Western blotting	1:500	Fig 1

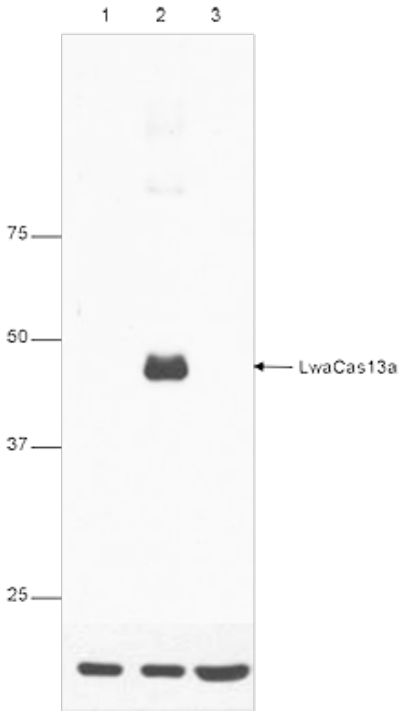
Target Description

CRISPR systems are adaptable immune mechanisms which are present in many bacteria to protect themselves from foreign nucleic acids, such as viruses, transposable elements or plasmids. The CRISPR/Cas9 (CRISPR-associated protein 9 nuclease) system from S. pyogenes was the first to be adapted for inducing sequence-specific double stranded breaks and targeted genome editing. This system is unique and flexible due to its dependence on RNA as the moiety that targets the nuclease to a desired DNA sequence and can be used to induce indel mutations, specific sequence replacements or insertions and large deletions or genomic rearrangements at any desired location in the genome. In addition, Cas9 can also be used to mediate upregulation of specific endogenous genes or to alter histone modifications or DNA methylation. Recently, a so-called class 2 type VI CRISPR system has been identified which is characterized by the presence of the single effector protein. Cas13a is one of the proteins belonging to the class 2 type VI system identified so far. These proteins lack homology to other DNA nuclease domains but contain two Higher Eukaryotes and Prokaryotes Nucleotide-binding (HEPN) domains and are thought to function solely as an RNA-guided RNA-targeting CRISPR effector.

Diagenode sa. BELIGUM | EUROPE
LIEGE SCIENCE PARK
Rue Bois Saint-Jean, 3
4102 Seraing (Ougrée) - Belgium
Tel: +32 4 364 20 50
Fax: +32 4 364 20 51
info@diagenode.com | orders@diagenode.com

Diagenode Inc. USA | NORTH AMERICA
400 Morris Avenue, Suite 101
Denville, NJ 07834 - USA
Tel: +1 862 209-4680
Fax: +1 862 209-4681
info.na@diagenode.com | orders.na@diagenode.com

Validation data



Western blot analysis using the Diagenode monoclonal antibody directed against LwaCas13a

Western blot was performed on 20 µg protein extracts from HEK293 cells (lane 1), HEK293 cells spiked with 1 ng recombinant LwaCas13a protein (lane 2) and HEK293 cells transiently expressing full-length Cas13b (lane 3), using the Diagenode antibody against LwaCas13a (Cat. No. C15100149). The antibody was diluted 1:500 in PBS-T containing 0.5% NFDM. The marker is shown on the left, the position of the Cas13b protein is indicated on the right. The bottom panel shows the result of a WB performed with an actin antibody, used as a loading control.

Diagenode sa. BELIGUM | EUROPE
LIEGE SCIENCE PARK
Rue Bois Saint-Jean, 3
4102 Seraing (Ougrée) - Belgium
Tel: +32 4 364 20 50
Fax: +32 4 364 20 51
info@diagenode.com | orders@diagenode.com

Diagenode Inc. USA | NORTH AMERICA
400 Morris Avenue, Suite 101
Denville, NJ 07834 - USA
Tel: +1 862 209-4680
Fax: +1 862 209-4681
info.na@diagenode.com | orders.na@diagenode.com