

# Monoclonal antibody against outer membrane lipoprotein lpLA7 Borrelia burgdorferi [LA-7]

Product No. ADG0115L

## Description

Lyme disease is the most common vector-borne disease in North America and Europe. The causative agent *Borrelia burgdorferi* is a bacterium that is maintained in an enzoonotic cycle between *lxodes* ticks and a large range of mammals. IpLA7, an immunogenic outer membrane lipoprotein of Borrelia burgdorferi, produced during infection, has been shown to play a redundant role in mammalian infection. IpLA7 facilitates pathogen survival in all tested phases of the vector-specific spirochete life cycle, including tick-to-host transmission.

## **Properties**

The monoclonal antibody ADG0115L (**clone LA-7**) is a murine monoclonal antibody, subclass IgG<sub>2a</sub> recognizing IpLA7. Mice were immunized with cell lysates of *Borrelia burgdorferi*. The antibody has been purified from cell culture supernatant using Protein G affinity chromatography.

### Presentation

Screw capped vial containing 1 mg of purified antibody in PBS pH 7.4. The IgG concentration is given on the vial label. Spin the vial briefly before opening.

## Storage and Stability

Store the antibody at  $2^{\circ}-8^{\circ}$ C. For long-term storage the antibody should be aliquoted and stored at  $-20^{\circ}$ C or colder. It is recommended to avoid freeze-thaw cycles.

## **Applications**

### A. ELISA

The antibody can be used as capture antibody in ELISAs. An antibody concentration of 1-10  $\mu$ g/ml is recommended.

## **B. Westernblot**

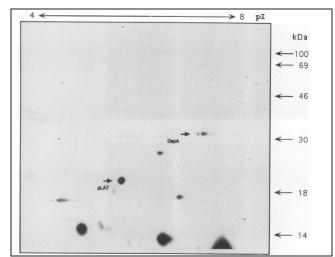
The antibody is suitable for Western blot analysis, detecting native and recombinant lpLA7 following SDS-PAGE under reducing conditions. A primary antibody concentration of 1-10  $\mu$ g/mL is recommended.



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## C. Immunocytochemistry

The antibody can be used for immunocytochemistry on paraformaldehyde fixed spirochetes.



2D gel of *Borrelia burgdorferi* lipoproteins, as identified by biosynthetic labeling with [<sup>3</sup>H]palmitate. pLA7=lpLA7

### References

- 1. Characterization of Borrelia burgdorferi associated antigens by monoclonal antibodies. Kramer et al. *Immunobiol.* 1990; 181:357-366
- Molecular and immunological characterization of a novel polymorphic lipoprotein of Borrelia burgdorferi. Wallich et al. *Infect. Immun.* 1993; 61(10):4158-4166
- 3. The lipoprotein La7 contributes to Borrelia burgdorferi persistence in ticks and their transmission to naïve hosts. Yang et al. *Microbes Infect.* 2013; 15:729-737
- 4. Immunolocalization of a 22 kDa protein (IpLA7, P22) of Borrelia burgdorferi. Grewe et al. *FEMS Microbiol. Lett.* 1996; 138:215-219
- Recombinant low-molecular-mass proteins pG and LA7 from Borrelia burgdorferi reveal low diagnostic sensitivity in an enzyme-linked immunosorbent assay. Rauer et al. 2001; 39(5): 2039-2040

#### Hinweis/Note:

Der Packungsbeileger dient nur als erste Information. Der relevante Packungsbeileger liegt der Ware bei.

The datasheet is for information purposes only. The current datasheet will be enclosed with product shipment.