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Datasheet for ABIN964719

anti-OspA antibody

1 Image

Overview

Quantity:	100 µg
Target:	OspA
Reactivity:	Borrelia burgdorferi
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This OspA antibody is un-conjugated
Application:	Western Blotting (WB), Lateral Flow (LF)

Product Details

Immunogen:	MBP-fusion protein corresponding to Borrelia burgdorferi OspA protein. Immunogen Type: RecombinantProtein
Isotype:	IgG
Specificity:	This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. This antibody is specific for Borrelia burgdorferi OspA protein. A BLAST analysis was used to suggest cross-reactivity with OspA from B. burgdorferi and sources based on 100% homology with the immunizing sequence. Cross-reactivity with OspA or Osp from other sources has not been determined.
Characteristics:	Outer-Surface Protein A (OspA), a lipoprotein from Borrelia burgdorferi encoded on its Plasmid lp54, is a major component of the spirochete's extracellular matrix. OspA probably serves as a lipid-anchor. The spirochetes migrate from the tick midgut during feeding to its salivary glands and are thus transmitted to the mammal host. This transition may be facilitated by changes in expression of some B. burgdorferi genes. Upon transmission of the spirochete from the Ixodes

Product Details

tick to mammalian host, the transcript level of OspA can change. It is believed that expression of the various proteins associated with the spirochete may be regulated by the changes in tick life cycle, changes in conditions during tick feeding (such as temperature, pH, and nutrients) and/or in coordination with the course of infection of the mammal host. *B. burgdorferi* can attach to (and also differentially express antigens in) diverse tissues within the vertebrate host and the tick vector, suggesting that physiological factors other than pH and temperature may play roles in modulating *B. burgdorferi* gene expression.

Purification: purified

Sterility: Sterile filtered

Target Details

Target: OspA

Abstract: [OspA Products](#)

Background: Outer-Surface Protein A (OspA), a lipoprotein from *Borrelia burgdorferi* encoded on its Plasmid lp54, is a major component of the spirochete's extracellular matrix. OspA probably serves as a lipid-anchor. The spirochetes migrate from the tick midgut during feeding to its salivary glands and are thus transmitted to the mammal host. This transition may be facilitated by changes in expression of some *B. burgdorferi* genes. Upon transmission of the spirochete from the Ixodes tick to mammalian host, the transcript level of OspA can change. It is believed that expression of the various proteins associated with the spirochete may be regulated by the changes in tick life cycle, changes in conditions during tick feeding (such as temperature, pH, and nutrients) and/or in coordination with the course of infection of the mammal host. *B. burgdorferi* can attach to (and also differentially express antigens in) diverse tissues within the vertebrate host and the tick vector, suggesting that physiological factors other than pH and temperature may play roles in modulating *B. burgdorferi* gene expression.

Synonyms: Outer surface protein A, *Borrelia burgdorferi* OspA

Gene ID: 1194357

NCBI Accession: [NP_045688](#)

UniProt: [P0C926](#)

Application Details

Application Notes: This protein-A purified antibody has been tested for use in Western blotting. Specific conditions

Application Details

for reactivity should be optimized by the user. Expect a band approximately 28.1 kDa in size corresponding to *Borrelia burgdorferi* OspA protein by Western blotting in the appropriate cell lysate or extract.

Comment: Gene Name: ospA, BB_A15

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution Buffer: Restore with deionized water (or equivalent), Reconstitution Volume: 100 μ L

Concentration: 1.0 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

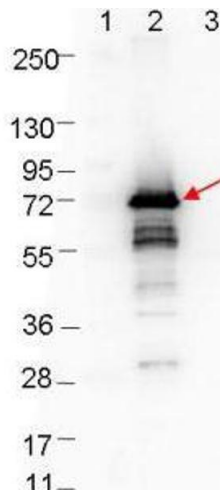
Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C

Storage Comment: Store vial at 4° C before opening. DO NOT FREEZE. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing alkaline phosphatase conjugates will result in a substantial loss of enzymatic activity. Expiration date is one (1) year from date of opening.

Expiry Date: 12 months



Western Blotting

Image 1. Western blot showing detection of 0.1 μg of recombinant OspA protein. Lane 1: Molecular weight markers. Lane 2: MBP-OspA fusion protein (arrow; expected MW: 70.5 kDa). Lane 3: MBP alone. Protein was run on a 4-20% gel, then transferred to 0.45 μm nitrocellulose. After blocking with 1% BSA-TTBS, diluted to 1X) overnight at 4°C, primary antibody was used at 1:1000 at room temperature for 30 min. HRP-conjugated Goat-Anti-Rabbit secondary antibody was used at 1:40,000 in ABIN925618 blocking buffer and imaged on the MP 4000 imaging system (Bio-Rad).