10320 Camino Santa Fe, Suite G
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Anti-OspA (RABBIT) Antibody
OspA Antibody
Catalog # ASR4447

Specification

Anti-OspA (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Borrelia burgdorferi**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This protein-A purified antibody has been tested for use in ELISA and Western blotting. Specific conditions 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.**
Physical State	**Lyophilized**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**MBP-fusion protein corresponding to Borrelia burgdorferi OspA protein.**
Reconstitution Volume	**100 µL**
Reconstitution Buffer	**Restore with deionized water (or equivalent)**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-OspA (RABBIT) Antibody - Additional Information

Other Names
1194357

Purity
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.

Storage Condition
Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

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Anti-OspA (RABBIT) Antibody - Protein Information

Name ospA {ECO:0000303|PubMed:2761388}

Function
Induces host (human and mouse) cytokine release by monocyte cell lines via TLR2 and CD14; nonlipidated protein does not stimulate host cells (PubMed:10426995).

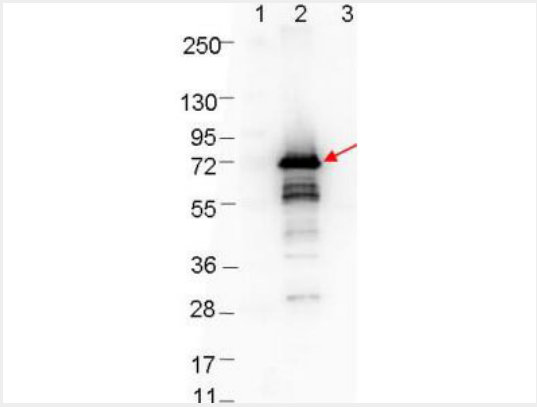
Cellular Location
Cell outer membrane; Lipid-anchor {ECO:0000255|PROSITE-ProRule:PRU00303, ECO:0000305|PubMed:10426995}. Cell surface

Anti-OspA (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-OspA (RABBIT) Antibody - Images



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 (p/n MB-013, 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 (p/n 611-103-122) secondary antibody was used at 1:40,000 in MB-070 blocking buffer and imaged on the VersaDoc™ MP 4000 imaging system (Bio-Rad).

Anti-OspA (RABBIT) Antibody - 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.