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Anti-OspC (RABBIT) Antibody

OspC Antibody
Catalog # ASR4443

Specification

Anti-OspC (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Borrelia burgdorferi**
Clonality	**Polyclonal**
Application	**WB, I, LCI**
Application Note	**This protein-A purified antibody has been tested for use in Western blotting and in ELISA. Specific conditions for reactivity should be optimized by the user. Expect a band approximately 20.7 kDa in size corresponding to Borrelia burgdorferi OspC 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 OspC protein.**
Reconstitution Volume	**100 µL**
Reconstitution Buffer	**Restore with deionized water (or equivalent)**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-OspC (RABBIT) Antibody - Additional Information

Other Names
1194415

Purity
This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. This antibody is specific for Borrelia burgdorferi OspC protein. A BLAST analysis was used to suggest cross-reactivity with p39 from B. burgdorferi, afzelii, and valaisiana sources based on 100% homology with the immunizing sequence. Partial reactivity is expected against B. japonica and americana sources based on 94% homology. Cross-reactivity with OspC 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.

Anti-OspC (RABBIT) Antibody - Protein Information

Name ospC {ECO:0000303|PubMed:8478108}

Function
A major immunodominant protein in mammalian hosts (PubMed:8098841, PubMed:8225587, PubMed:8478109). Required for the initial stages of mammalian infection (PubMed:14970347, PubMed:16714588, PubMed:20199597, PubMed:28873507). Interaction with tick I.ricinus salivary protein Salp15 protects the bacteria from antibody-mediated killing in vitro and in vivo (PubMed:18752445). Inhibits macrophage-mediated phagocytosis of the bacteria (PubMed:26438793). Binds human plasminogen; this probably confers an extracellular protease activity on the bacteria that allows it to traverse tissue (PubMed:20199597, PubMed:22433849). Binds human complement C4-B, which may inhibit the complement cascade (Probable) (PubMed:28873507). Experiments in mice suggest it may play another role after initial infection (Probable) (PubMed:27611840).

Cellular Location
Cell outer membrane; Lipid-anchor. Cell surface Note=Expressed in a punctate fashion on a subset of cells in vitro

Anti-OspC (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-OspC (RABBIT) Antibody - Images

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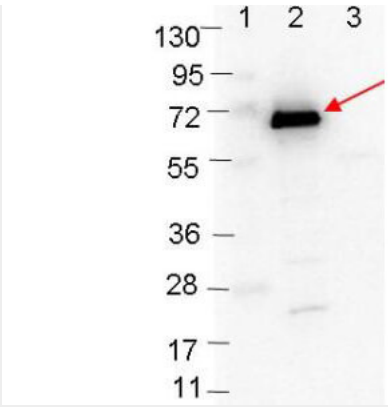

Western blot showing detection of 0.1 µg of recombinant OspC protein. Lane 1: Molecular weight markers. Lane 2: MBP-OspC fusion protein (arrow; expected MW: 63.1 kDa). Lane 3: MBP alone. Protein was run on a 4-20% gel, then transferred to 0.45 µm nitrocellulose. After blocking with 1% BSA-TTBS (p/n MB-013, 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-OspC (RABBIT) Antibody - Background

Outer Surface Protein C, or OspC, is a 20.7 kDa immunogenic protein on the outer surface of the spirochete Borrelia burgdorferi. Its function is not known, but it is located with lipid-anchoring sites on the outer cell membrane.