

Datasheet for 200-401-C15**OspB Antibody****Overview**

Description:	Anti-OspB (RABBIT) Antibody - 200-401-C15
Item No.:	200-401-C15
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Borrelia burgdorferi
Host Species:	Rabbit

Product Details**Background:**

OspB, is one of the major Outer Surface Proteins of the outer membrane of *Borrelia burgdorferi*, which is composed of various unique outer surface proteins (Osp) that have been characterized (OspA through OspF). The Osp proteins are lipoproteins anchored by N-terminally attached fatty acid molecules to the membrane. They are presumed to play a role in virulence, transmission, or survival in the tick. Two of the major surface Ag of *Borrelia burgdorferi*, the 31-kDa OspA and 34-kDa OspB proteins, show a high degree of sequence similarity, are encoded by a 49-kb plasmid and share a common promoter, and are coordinately transcribed. OspA, OspB, and OspD are expressed by *B. burgdorferi* residing in the gut of unfed ticks, suggesting that they promote the persistence of the spirochete in ticks between blood meals. OspB has a contributing role in the adherence of *B. burgdorferi* to the tick gut. The C terminus of OspB is important for eliciting a protective immune response to OspB. *B. burgdorferi* has the ability to vary its surface proteins in response to immune attack.

Synonyms:	rabbit anti-OspB Antibody, Outer surface protein B, <i>Borrelia burgdorferi</i> OspB, locus BB_A16
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ospB
Reactivity:	<i>Borrelia burgdorferi</i>

Immunogen Type:	Recombinant Protein
Immunogen:	MBP-fusion protein corresponding to <i>Borrelia burgdorferi</i> OspB protein.
Purity/Specificity:	This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. This antibody is specific for <i>Borrelia burgdorferi</i> OspB protein. A BLAST analysis was used to suggest cross-reactivity with OspB from <i>B. burgdorferi</i> , <i>afzelii</i> , <i>spielmanii</i> , and <i>garinii</i> sources based on 100% homology with the immunizing sequence, and with <i>B. valaisiana</i> based on 99% homology. Cross-reactivity with OspB from other sources has not been determined.
Relevant Links:	• UniProtKB - P17739 • NCBI - WP_010890379.1 • GeneID - 1194340

Application Details

Tested Applications:	ELISA, WB
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 30.3 kDa in size corresponding to <i>Borrelia burgdorferi</i> OspB protein by Western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:13,000
WB:	1:1,000

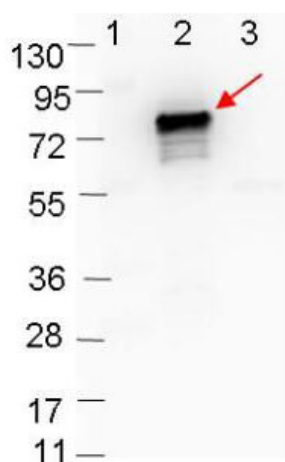
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western blot showing detection of 0.1 µg of recombinant OspB protein. Lane 1: Molecular weight markers. Lane 2: MBP-OspB fusion protein (arrow; expected MW = 72.7 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).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.