

Datasheet for 200-401-C12**p35 Antibody****Overview**

Description:	Anti-p35 (RABBIT) Antibody - 200-401-C12
Item No.:	200-401-C12
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Borrelia burgdorferi
Host Species:	Rabbit

Product Details**Background:**

The p35 kDa protein of the spirochete *Borrelia burgdorferi* is being investigated for use as an early diagnostic marker of Lyme Disease. *Borrelia* may change its antigenic composition in its need for adaptation to stresses imposed by changes in conditions from cycling between its arthropod and mammalian hosts. This group of *B. burgdorferi* proteins may be induced in the tick midgut during the feeding event. The p35 protein elicits a protective immunity from wild type *B. burgdorferi*. It has been shown that p35 expression in *B. burgdorferi* is upregulated in the stationary growth phase, and that a temperature of 34°C but not 24°C influenced the expression. The expression of a majority of the proteins expressed in early Lyme disease is affected pH, being abundantly expressed at pH 7.0 (resembling the tick midgut pH of 6.8 during feeding) but only sparsely at pH 8.0 (a condition closer to that of the unfed tick midgut pH of 7.4). The encoding genes may be coregulated. The 35-kDa antigen has been shown to be a statistically significant marker in IgG immunoblots in a study of patients with early Lyme disease who presented with erythema migrans. Recombinant p35 protein may be useful as a diagnostic reagent, especially in combination with other antigens that have been deemed relevant in serodiagnosis of early Lyme disease.

Synonyms:	rabbit anti-p35 Antibody, bba64, <i>Borrelia burgdorferi</i> p35
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name: BB-H32, bba64

Reactivity:	Borrelia burgdorferi
Immunogen Type:	Recombinant Protein
Immunogen:	MBP-fusion protein corresponding to Borrelia burgdorferi p35 protein.
Purity/Specificity:	This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. This antibody is specific for Borrelia burgdorferi p35 protein. A BLAST analysis was used to suggest cross-reactivity with p35 from B. burgdorferi, garinii, and afzelii sources based on 100% homology with the immunizing sequence. Cross-reactivity with p35 from other sources has not been determined.
Relevant Links:	• UniProtKB - O50687 • NCBI - WP_010256558.1 • GenelD - 1194146

Application Details

Tested Applications:	ELISA, WB
Application Note:	This protein-A purified antibody has been tested for use in Western blotting and ELISA. Specific conditions for reactivity should be optimized by the user. Expect a band approximately 27.1 kDa in size corresponding to Borrelia burgdorferi OspA 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:	>1:5,000
WB:	1:1,000

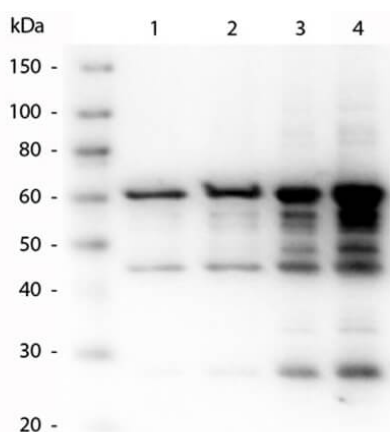
Formulation

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

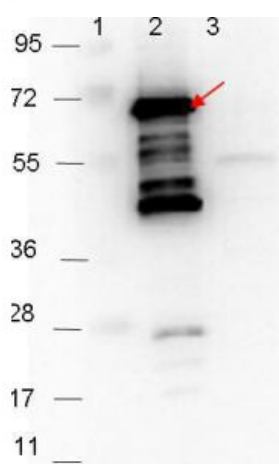
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 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 of Rabbit anti-p35 antibody. Lane 1: p35 recombinant protein 50 ng load. Lane 2: p35 recombinant protein 100 ng load. Lane 3: p35 recombinant protein 250 ng load. Lane 4: p35 recombinant protein 500 ng load. Primary antibody: p35 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 60 kDa, 60 kDa for p35. Other band(s): p35 splice variants and isoforms.



Western Blot

Western blot showing detection of 0.1 µg of recombinant p35 protein. Lane 1: Molecular weight markers. Lane 2: MBP-p35 fusion protein (arrow; expected MW: 69.5 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).

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.