Datasheet for ABIN1043768

# anti-P35 antibody

2 Images | 1 Publication

Go to Product page

## Overview

| | |
|---|---|
| Quantity: | 100 µg |
| Target: | P35 |
| Reactivity: | Borrelia burgdorferi |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Application: | Western Blotting (WB), ELISA |

## Product Details

| | |
|---|---|
| Purpose: | p35 Antibody |
| Immunogen: | Immunogen: MBP-fusion protein corresponding to Borrelia burgdorferi p35 protein. Immunogen Type: Recombinant Protein |
| Isotype: | IgG |
| Cross-Reactivity (Details): | This antibody is specific for Borrelia burgdorferi p35 protein. |
| Characteristics: | Synonyms: rabbit anti-p35 Antibody, bba64, Borrelia burgdorferi p35 |
| Purification: | This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. |

## Target Details

| | |
|---|---|
| Target: | P35 |
| Background: | 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 |

## Target Details

| | |
|---|---|
| | 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. |
| Gene ID: | 1194146 |
| NCBI Accession: | WP_010256558 |
| UniProt: | O50687 |

## Application Details

| | |
|---|---|
| Application Notes: | 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.<br>Western Blot Dilution: 1:1,000<br>ELISA Dilution: >1:5,000<br>Other: User Optimized |
| Restrictions: | For Research Use only |

## Handling

| | |
|---|---|
| Format: | Lyophilized |
| Reconstitution: | Reconstitution Volume: 100 µL<br>Reconstitution Buffer: Restore with deionized water (or equivalent) |
| Concentration: | 1.0 mg/mL |

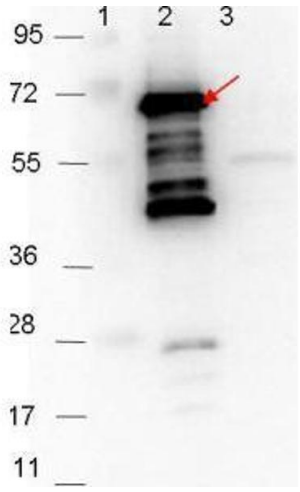
## Handling

| | |
|---|---|
| Buffer: | Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2<br>Stabilizer: None<br>Preservative: 0.01 % (w/v) Sodium Azide |
| 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,-20 °C |
| Storage Comment: | 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. |
| Expiry Date: | 12 months |

## Publications

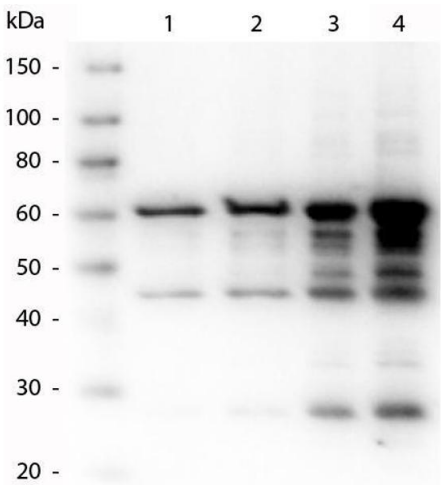
| | |
|---|---|
| Product cited in: | Gautam, Hathaway, McClain, Ramesh, Ramamoorthy: "Analysis of the determinants of bba64 (P35) gene expression in Borrelia burgdorferi using a gfp reporter." in: **Microbiology (Reading, England)**, Vol. 154, Issue Pt 1, pp. 275-85, (2008) (PubMed). |

## Images




**Western Blotting**

**Image 1.** 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 , 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).




## Western Blotting

**Image 2.** 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: ABIN925618 for 30 min at RT. Predicted/Observed size: 60 kDa, 60 kDa for p35. Other band(s): p35 splice variants and isoforms.