

Product datasheet for TA396878S

BB-H32, bba64 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, WB Recommended Dilution: WB: 1:1.000

ELISA: >1:5,000

Reactivity: Borrelia burgdorferi

Host: Rabbit

Clonality: Polyclonal

Immunogen: MBP-fusion protein corresponding to Borrelia burgdorferi p35 protein.

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.

Formulation: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Concentration: 1.4 mg/mL - lot specific

Conjugation: Unconjugated

Storage: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of

reagent (25 μ L). To minimize loss of volume dilute 1:10 by adding 225 μ L of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing

and thawing.

Stability: Expiration date is three (3) months from date of receipt.

Database Link: <u>O50687</u>



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



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. Some 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 many proteins correlated with early Lyme disease is affected by pH, the proteins 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.

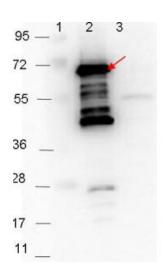
Synonyms:

rabbit anti-p35 Antibody, bba64, Borrelia burgdorferi p35

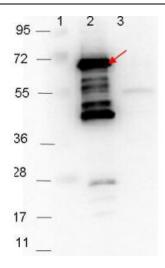
Note:

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 p35 protein by Western blotting in the appropriate cell lysate or extract.

Product images:



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).



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