

## **Product datasheet for TA396874S**

## dbpA, BB\_A24 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 Dbp-A 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 DbpA protein. A BLAST analysis was used to suggest cross-reactivity with DbpA from Borrelia burgdorferi sources based on 100% homology with the immunizing sequence. Partial reactivity is expected against Borrelia garinii sources based on 60-80% homology. Cross-

reactivity with DbpA from other sources has not been determined.

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

**Concentration:** 1.1 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  $\mu$ L). To minimize loss of volume dilute 1:10 by adding 225  $\mu$ 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>050917</u>



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## Background:

This product is antibody made against DbpA, or Decorin Binding Protein A from the spirochete Borrelia burgdorferi, which is carried by Ixodes ticks. DbpA from other microbial organisms such as E. coli (ATP-dependent RNA helicase DbpA) are significantly different. The spirochete migrates from the tick midgut during tick feeding to tick salivary glands and are thus transmitted to the mammal host. This transition may be facilitated by changes in expression of some B. burgdorferi genes. Spirochetal surface adhesions mediate attachment to decorin, a major component of the host extracellular matrix, enabling bacteria to colonize in mammalian tissues. It is believed that expression of the various proteins associated with the spirochete may be regulated by the changes in tick life cycle, changes in conditions during tick feeding (such as temperature, pH, and nutrients) and/or in coordination with the course of infection of the mammal host.

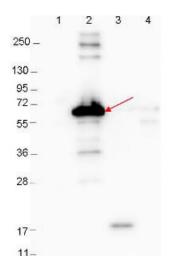
Synonyms:

Note:

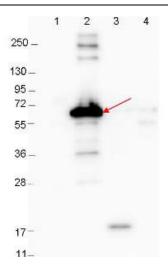
rabbit anti-DbpA Antibody, Decorin-binding Protein, Borrelia burgdorferi DbpA, dbp-A, dbp A

This protein-A purified antibody has been tested for use in ELISA and Western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 18 kDa in size corresponding to Borrelia burgdorferi DbpA protein by Western blotting in the appropriate cell lysate or extract.

## **Product images:**



Western blot showing detection of 0.1 µg recombinant proteins in western blot. Lane 1: Molecular weight markers. Lane 2: MBP-DbpA fusion protein (arrow; expected MW: 60.9 kDa). Lane 3: DbpA, MBP removed by TEV cleavage. Lane 4: 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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