

Anti-DbpA (RABBIT) Antibody

DbpA Antibody Catalog # ASR4437

Specification

Anti-DbpA (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated
Target Species Borrelia burgdorferi

Clonality Polyclonal Application WB, E, I, LCI

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 end user. Expect a band approximately 18.5 kDa in size corresponding to Borrelia burgdorferi DbpA protein by Western blotting in the

appropriate cell lysate or extract.

Physical State Lyophilized

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen MBP-fusion protein corresponding to

Borrelia burgdorferi Dbp-A protein.

Reconstitution Volume 100 µ

Reconstitution Buffer Restore with deionized water (or

equivalent)

Preservative 0.01% (w/v) Sodium Azide

Anti-DbpA (RABBIT) Antibody - Additional Information

Other Names 1194347

Purity

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.

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.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.



Anti-DbpA (RABBIT) Antibody - Protein Information

Name dbpA

Function

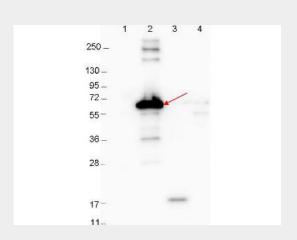
Binds to decorin which may mediate the adherence of B.burgdorferi to collagen fibers in skin and other tissues.

Anti-DbpA (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-DbpA (RABBIT) Antibody - Images



Western blot showing detection of 0.1 μ g 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 μ m 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 VersaDocTM MP 4000 imaging system (Bio-Rad).

Anti-DbpA (RABBIT) Antibody - 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.