

**Anti-DbpB (RABBIT) Antibody**  
**DbpB Antibody**  
**Catalog # ASR4453****Specification**

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**Anti-DbpB (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	<i>Borrelia burgdorferi</i>
Clonality	Polyclonal
Application	WB, 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 user. Expect a band approximately 17.9 kDa in size corresponding to <i>Borrelia burgdorferi</i> DbpB 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 <i>Borrelia burgdorferi</i> Dbp-B protein.
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

**Anti-DbpB (RABBIT) Antibody - Additional Information****Other Names**  
1194341**Purity**

This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. This antibody is specific for *Borrelia burgdorferi* DbpB protein. A BLAST analysis was used to suggest cross-reactivity with DbpB from *B. burgdorferi* and *B. garinii* sources based on 100% homology with the immunizing sequence. Cross-reactivity with DbpB 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.

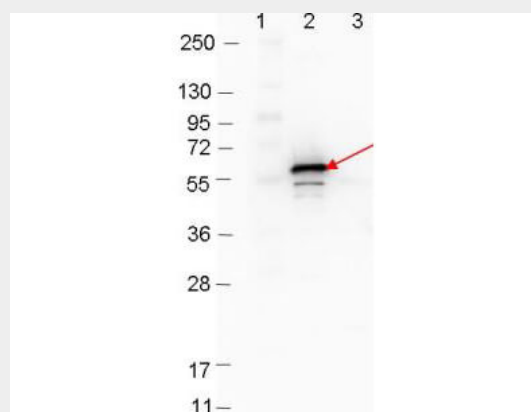
## Anti-DbpB (RABBIT) Antibody - Protein Information

## Anti-DbpB (RABBIT) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-DbpB (RABBIT) Antibody - Images



Western blot showing detection of 0.1  $\mu$ g of recombinant DbpB protein. Lane 1: Molecular weight markers. Lane 2: MBP-DbpB fusion protein (arrow; expected MW = 60.3 kDa). Lane 3: MBP alone. Protein was run on a 4-20% gel, then transferred to 0.45  $\mu$ 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 VersaDoc™ MP 4000 imaging system (Bio-Rad).

## Anti-DbpB (RABBIT) Antibody - Background

Decorin-binding protein B, or DbpB, binds to decorin, which may mediate the adherence of *B. burgdorferi* to collagen fibers in skin and other tissues. Spirochetal surface adhesions mediate attachment to decorin, a major component of the host extracellular matrix enabling bacteria to colonize in mammalian tissues. The spirochete migrates from the tick midgut during feeding to its salivary glands and are thus transmitted to the mammal host. This transition may be facilitated by changes in expression of some *B. burgdorferi* genes. 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. *Borrelia burgdorferi* can colonize multiple tissues, and is capable of attachment to diverse cell types. The expression of decorin-binding protein (Dbp) A and/or DbpB, two *B. burgdorferi* surface proteins that bind GAGs, is sufficient to convert a high-passage nonadherent *B. burgdorferi* strain into one that efficiently binds 293 epithelial cells.