

# Anti-ErpN/OspE (RABBIT) Antibody

ErpN/OspE Antibody Catalog # ASR4441

# **Specification**

# Anti-ErpN/OspE (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated
Target Species Borrelia burgdorferi

Clonality Polyclonal Application WB, E, I, LCI

Application Note Anti-ErpN/OspE antibody has been tested

in ELISA and Western Blot. Specific conditions for reactivity should be

optimized by the end user. Expect a band at 17.1 kDa in size corresponding to ErpN/OspE 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 ErpN/OspE protein.

Reconstitution Volume 100 µL

Reconstitution Buffer Restore with deionized water (or

equivalent)

Preservative 0.01% (w/v) Sodium Azide

### Anti-ErpN/OspE (RABBIT) Antibody - Additional Information

# Other Names 1194664

### **Purity**

This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. It is directed against, and shows specific reactivity for, Borrelia burgdorferi OspE protein. Reactivity with ErpN/OspE protein 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-ErpN/OspE (RABBIT) Antibody - Protein Information

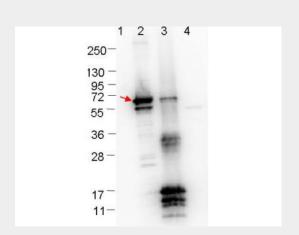


#### Anti-ErpN/OspE (RABBIT) Antibody - Protocols

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-ErpN/OspE (RABBIT) Antibody - Images



Western blot showing detection of 0.1  $\mu$ g recombinant proteins in Western blot. Lane 1: Molecular weight markers. Lane 2: MBP-ErpN/OspE fusion protein (arrow; 59.5 kDa expected MW). Lane 3: fusion protein (MBP-tagged) plus cleaved fusion proteins (without MBP). Lane 4: MBP alone. The lower bands are probably breakdown products. The upper bands in lane 3 are fusion protein (top band), or breakdown products of the fusion protein (bands in middle of blot). 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<sup>TM</sup> MP 4000 imaging system (Bio-Rad).

### Anti-ErpN/OspE (RABBIT) Antibody - Background

This product is antibody made against ErpN (OspE/F-Related Protein N), from the spirochete Borrelia burgdorferi, which is carried by Ixodes ticks. Erp proteins from Borrelia burgdorferi are postulated to be lipoproteins, based on their predicted amino acid sequences. 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. Several studies have demonstrated that infected humans and animals produce antibodies directed against Erp proteins within the first 2-4 weeks of infection, indicative of Erp synthesis during the initial stages of vertebrate infection. It is postulated that surface-exposed Erp proteins could facilitate interactions with host tissues during the establishment of vertebrate infection.