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# Product datasheet for TA396876S

## **ErpA8 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 ErpN/OspE protein.
Specificity:	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.
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>H7C7N5</u>



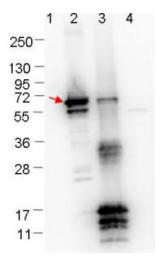
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#### **GRIGENE** ErpA8 Rabbit Polyclonal Antibody – TA396876S

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 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. 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.
Synonyms:	Rabbit anti-ErpN Antibody, rabbit anti-OspE Antibody, rabbit anti-ErpN/OspE Antibody, ErpA, outer surface protein E, Borrelia burgdorferi OspE, ospE/F-Related Protein N, ErpA8, BB_L39, cp32-8
Note:	Anti-ErpN/OspE antibody has been tested in ELISA and Western Blot. Specific conditions for

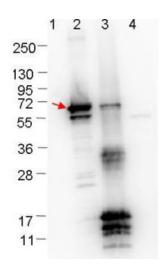
reactivity should be optimized by the end user. Expect a band at 17.1 kDa in size corresponding to ErpN/OspE by Western blotting in the appropriate cell lysate or extract.

### **Product images:**



Western blot showing detection of 0.1 µg 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 (MBPtagged) 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 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<sup>™</sup> MP 4000 imaging system (Bio-Rad).

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Western blot showing detection of 0.1 µg recombinant protein 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 (MBPtagged) plus cleaved fusion protein (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>™</sup> MP 4000 imaging system (Bio-Rad).

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