

## **Product datasheet for TA396875**

## BB F01 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 ErpD/Arp37 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 ErpD protein. Reactivity with ErpD/Arp37 protein from other sources has not

been determined.

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

**Reconstitution Method:** Restore with deionized water (or equivalent) - Reconstitution Volume: 100 μL

**Concentration:** 1.0 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: G5IXI1



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Background:

This product is antibody made against Erp (ospE/F-Related Protein), also known as Arp37, 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.

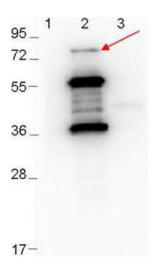
Synonyms:

Rabbit anti-ErpD Antibody, rabbit anti-Arp37 Antibody, rabbit anti-Arp37/ErpD Antibody, Arp37, Borrelia burgdorferi ErpD

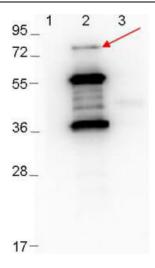
Note:

Anti-ErpD antibody has been tested in ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect bands at ~37.5 kDa and ~65 kDa in size corresponding to ErpD/Arp37 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-ErpD/Arp37 fusion proteins (arrow: expected MW of major band: 73.3 kDa). Lane 3: 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).



Western blot showing detection of 0.1 µg recombinant proteins in western blot. Lane 1: Molecular weight markers. Lane 2: MBP-ErpD/Arp37 fusion proteins (arrow: expected MW of major band: 73.3 kDa). Lane 3: 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).