

# Anti-Surface Lipoprotein p27 (RABBIT) Antibody

Surface Lipoprotein p27 Antibody Catalog # ASR4461

### **Specification**

### Anti-Surface Lipoprotein p27 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated
Target Species Borrelia burgdorferi

Clonality Polyclonal Application WB, E, I, LCI

Application Note Anti-Surface Lipoprotein p27 antibody has

been tested in ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~30.9 kDa in size corresponding to p27 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 Surface Lipoprotein

p27 protein.

Reconstitution Volume 100 μL

Reconstitution Buffer Restore with deionized water (or

equivalent)

Preservative 0.01% (w/v) Sodium Azide

## Anti-Surface Lipoprotein p27 (RABBIT) Antibody - Additional Information

## Other Names 1194336

#### **Purity**

This antibody was purified from monospecific antiserum by protein-A purified immunoaffinity chromatography, and cross-adsorbed against MBP. It is directed against, and shows specific reactivity for, Borrelia burgdorferi p27 protein. Reactivity with p27 protein from other sources has not been determined.

#### **Storage Condition**

Store vial at  $4^{\circ}$  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  $4^{\circ}$  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-Surface Lipoprotein p27 (RABBIT) Antibody - Protein Information

### Anti-Surface Lipoprotein p27 (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 Cytomety
- Cell Culture

### Anti-Surface Lipoprotein p27 (RABBIT) Antibody - Images



Western blot showing detection of 0.1  $\mu$ g of recombinant p27 protein. Lane 1: Molecular weight markers. Lane 2: MBP-p27 fusion protein (arrow; expected MW: 73.3 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<sup>™</sup> MP 4000 imaging system (Bio-Rad).

#### Anti-Surface Lipoprotein p27 (RABBIT) Antibody - Background

Surface Lipoprotein p27 of Borrelia burgdorferi is a surface-exposed lipoprotein that has been shown (by Western blot and Northern blot) to be expressed in the European B. burgdorferi strain B29, but not in the American strain B31. Cell envelope proteins of bacterial pathogens play important roles in the host-parasite interactions that occur during infection, including cell adherence, cell invasion, and immune cell activation or evasion. p27 is a basic protein of 248 amino acids with a typical prokaryotic leader sequence of 17 amino acid residues at the N-terminus of the proposed translation product. The p27 gene is located on a linear plasmid of a size of approximately 55 kb. Borrelia spirochetes are unique among diderm bacteria in their abundance of surface-displayed lipoproteins, some of which play important roles in the pathogenesis of Lyme disease and relapsing fever. There is evidence that Borrelia lipoproteins are specifically targeted to the bacterial surface, but that they can be retained in the periplasm by sequence-specific signals.