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Anti-CRASP-2 (RABBIT) Antibody

CRASP-2 Antibody
Catalog # ASR4459

Specification

Anti-CRASP-2 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Borrelia burgdorferi**
Clonality	**Polyclonal**
Application	**WB, E, 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 25.4 kDa in size corresponding to Borrelia burgdorferi CRASP-2 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 Borrelia burgdorferi CRASP-2 protein.**
Reconstitution Volume	**100 µL**
Reconstitution Buffer	**Restore with deionized water (or equivalent)**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-CRASP-2 (RABBIT) Antibody - Additional Information

Other Names
1194149

Purity
This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. This antibody is specific for Borrelia burgdorferi CRASP-2 protein. A BLAST analysis was used to suggest reactivity with CRASP-2 from B. burgdorferi sources based on 100% homology with the immunizing sequence. Partial cross-reactivity is expected against B. garinii, B. spielmanii, and valaisiana sources based on 91-89% homology. Cross-reactivity with CRASP-2 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.

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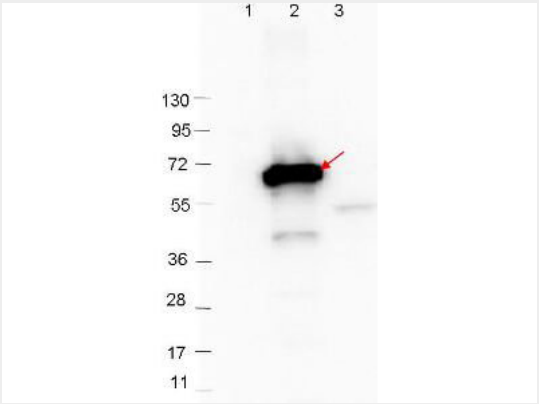
Anti-CRASP-2 (RABBIT) Antibody - Protein Information

Anti-CRASP-2 (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-CRASP-2 (RABBIT) Antibody - Images



Western Blot showing detection of 0.1 µg of recombinant CRASP-2 protein. Lane 1: Molecular weight markers. Lane 2: MBP-CRASP-2 fusion protein (arrow; expected MW = 67.8 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).

Anti-CRASP-2 (RABBIT) Antibody - Background

CRASP-2 (Complement Regulator-Acquiring Surface Protein 2) of Borrelia burgdorferi binds FHL-1 and factor H binding protein in a distinct way. It may be predominantly expressed by serum-resistant Borrelia strains. Borrelia burgdorferi sensu lato has the ability to evade immune systems to persist in a variety of vertebrate hosts. This activity is dependent on a number of factors. Some Borrelia species bind host-derived fluid-phase immune regulators FHL-1 and factor H to their surface via complement regulator-acquiring surface proteins (CRASPs). Factor H and FHL-1 serve as cofactors for factor I, a serine protease that cleaves complement component 3b (C3b) directly on the cell surface and thereby confers resistance of spirochetes to complement-mediated lysis. It is possible that because of discontinuous binding regions in the factor H/FHL-1, long distance interaction may be involved in binding of both immune regulators. Putative coiled-coil structural elements may be important in the interaction of B. burgdorferi CRASP-1 with factor H.