

**Anti-CRASP-1 (RABBIT) Antibody**  
**CRASP-1 Antibody**  
**Catalog # ASR4457****Specification**

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**Anti-CRASP-1 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	<i>Borrelia burgdorferi</i>
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 26.9 kDa in size corresponding to <i>Borrelia burgdorferi</i> CRASP-1 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 <i>Borrelia burgdorferi</i> CRASP-1 protein.
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

**Anti-CRASP-1 (RABBIT) Antibody - Additional Information****Other Names**  
1194383**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-1 protein. A BLAST analysis was used to suggest reactivity with CRASP-1 from *B. burgdorferi* and *B. garinii* sources based on 100% homology with the immunizing sequence. Partial cross-reactivity is expected against *B. spielmanii*, *afzelii*, and *valaisiana* sources based on 98% homology. Cross-reactivity with CRASP-1 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.

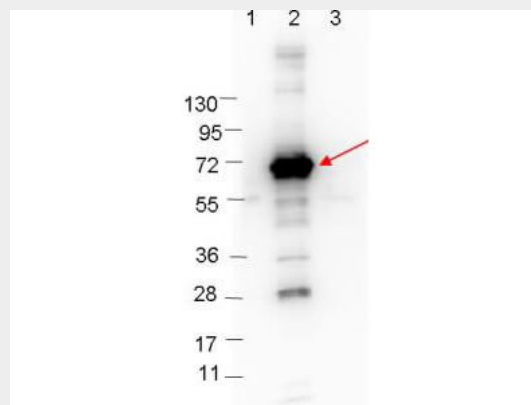
## Anti-CRASP-1 (RABBIT) Antibody - Protein Information

### Anti-CRASP-1 (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 Cytometry](#)
- [Cell Culture](#)

### Anti-CRASP-1 (RABBIT) Antibody - Images



Western blot showing detection of 0.1  $\mu$ g of recombinant CRASP-1 protein. Lane 1: Molecular weight markers. Lane 2: MBP-CRASP-1 fusion protein (arrow; expected MW = 69.3 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™ MP 4000 imaging system (Bio-Rad).

### Anti-CRASP-1 (RABBIT) Antibody - Background

CRASP-1, or Complement Regulator-Acquiring Surface Protein 1, is a multifunctional protein of Lyme disease-causing *B. burgdorferi* that binds to several human extracellular matrix proteins and plasminogen, including factor H (resulting in inhibition of complement activation in mammals) and Human Bone Morphogenic Protein 2. These interactions may contribute to adhesion, bacterial colonization, and organ tropism and may allow dissemination of *B. burgdorferi* in the host. *B. burgdorferi* spirochetes express up to 5 complement regulator-acquiring surface proteins. Multiple copies of sequences analogous to CRASP-1 genes have been detected in *Borrelia* plasmids. *Borrelia* species contain a large number of plasmids, of linear and circular, some of which appear to repeat sequences or contain fragments of other genes. These regions may serve as potentially usable information for the survival of *Borrelia* in its multiple environments during its life cycle. In addition, the sequence for CRASP-1 contains a repeated sequence folded into a stable stem loop structure typical of RNA genes.