

## Product datasheet for **TA396884S**

### CRASP1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	<b>WB:</b> 1:1,000 <b>ELISA:</b> 1:2,000
Reactivity:	Borrelia burgdorferi
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	MBP-fusion protein corresponding to Borrelia burgdorferi CRASP-1 protein.
Specificity:	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.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.5 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 µL). To minimize loss of volume dilute 1:10 by adding 225 µL 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:	<a href="#">Q66ZC1</a>



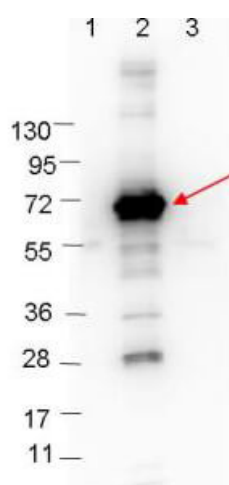
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**Background:** CRASP-1, or Complement Regulator-Acquiring Surface Protein 1, is a multifunctional protein of Lyme disease-causing *B. burgdorferi* that binds to several human extracellular matrix proteins and plasminogen, including factor H (resulting 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.

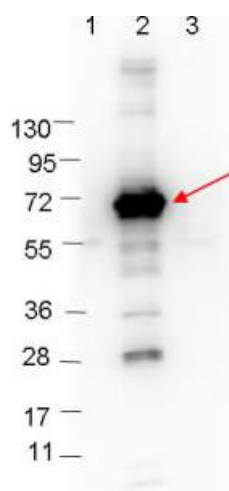
**Synonyms:** rabbit anti-CRASP-1 Antibody, *Borrelia burgdorferi* CRASP-1, CRASP1, CRASP 1, Complement regulator acquiring protein 1

**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 *Borrelia burgdorferi* CRASP-1 protein by Western blotting in the appropriate cell lysate or extract.

### Product images:



Western blot showing detection of 0.1 µg 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 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 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 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).