

Datasheet for 200-401-C18S**CRASP-1 Antibody****Overview**

Description:	Anti-CRASP-1 (RABBIT) Antibody - 200-401-C18S
Item No.:	200-401-C18S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Borrelia burgdorferi
Host Species:	Rabbit

Product Details

Background:	CRASP-1, or Complement Regulator-Acquiring Surface Protein 1, is a multifunctional protein of Lyme disease-causing <i>B. burgdorferi</i> 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 <i>B. burgdorferi</i> in the host. <i>B. burgdorferi</i> spirochetes express up to 5 complement regulator-acquiring surface proteins. Multiple copies of sequences analagous to CRASP-1 genes have been detected in <i>Borrelia</i> plasmids. <i>Borrelia</i> 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 <i>Borrelia</i> 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, <i>Borrelia burgdorferi</i> CRASP-1, CRASP1, CRASP 1, Complement regulator acquiring protein 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CRASP1
Reactivity:	<i>Borrelia burgdorferi</i>

Immunogen Type:	Recombinant Protein
Immunogen:	MBP-fusion protein corresponding to <i>Borrelia burgdorferi</i> CRASP-1 protein.
Purity/Specificity:	This product was Protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. This antibody is specific for <i>Borrelia burgdorferi</i> CRASP-1 protein. A BLAST analysis was used to suggest reactivity with CRASP-1 from <i>B. burgdorferi</i> and <i>B. garinii</i> sources based on 100% homology with the immunizing sequence. Partial cross-reactivity is expected against <i>B. spielmanii</i> , <i>afzelii</i> , and <i>valaisiana</i> sources based on 98% homology. Cross-reactivity with CRASP-1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q66ZC1 • NCBI - WP_010890397.1 • GeneID - 1194383

Application Details

Tested Applications:	ELISA, WB
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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000
WB:	1:1,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.5 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

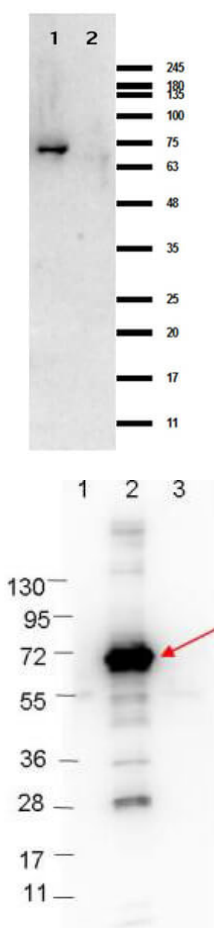
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: 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.

Expiration: Expiration date is three (3) months from date of receipt.

Images



Western Blot

Western Blot results of Rabbit Anti-Crsp-1 Antibody. Lane 1: Crsp 1 protein (p/n 000-001-C18). Lane 2: MBP (p/n 000-001-385). Load: 0.05 µL. Primary Antibody: Rabbit Anti-Crsp-1 Antibody (p/n 200-401-C18) at 1.0mg/mL overnight at 4°C. Secondary Antibody: Goat anti-Rabbit (p/n 611-101-122) at 1:70,000 for 30 min at RT. Blocking: BlockOut Buffer (p/n MB-073) for 30min at RT. Expect: ~63.9kDa.

Western Blot

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).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.