

Datasheet for 200-401-C18**CRASP-1 Antibody****Overview**

Description:	Anti-CRASP-1 (RABBIT) Antibody - 200-401-C18
Item No.:	200-401-C18
Size:	100 µg
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:	>1:5,000
WB:	1:1,000

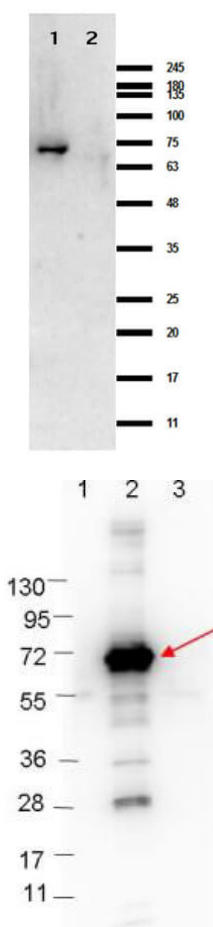
Formulation

Physical State:	Lyophilized
Concentration:	1.0 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
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot results of Rabbit Anti-Crasp-1 Antibody. Lane 1: Crasp 1 protein (p/n 000-001-C18). Lane 2: MBP (p/n 000-001-385). Load: 0.05 μ L. Primary Antibody: Rabbit Anti-Crasp-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 μ 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 μ 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).

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.