

Datasheet for 200-401-C19S**CRASP-2 Antibody****Overview**

Description:	Anti-CRASP-2 (RABBIT) Antibody - 200-401-C19S
Item No.:	200-401-C19S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Borrelia burgdorferi
Host Species:	Rabbit

Product Details

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.

Synonyms:	rabbit anti-CRASP-2 Antibody, <i>Borrelia burgdorferi</i> CRASP-2, CRASP2, CRASP 2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	cspZ, BB_H06
Reactivity:	<i>Borrelia burgdorferi</i>

Immunogen Type:	Recombinant Protein
Immunogen:	MBP-fusion protein corresponding to <i>Borrelia burgdorferi</i> CRASP-2 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-2 protein. A BLAST analysis was used to suggest reactivity with CRASP-2 from <i>B. burgdorferi</i> sources based on 100% homology with the immunizing sequence. Partial cross-reactivity is expected against <i>B. garinii</i> , <i>B. spielmanii</i> , and <i>valaisiana</i> sources based on 91-89% homology. Cross-reactivity with CRASP-2 from other sources has not been determined.
Relevant Links:	• UniProtKB - O50665 • NCBI - WP_010890313.1 • GeneID - 1194149

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 25.4 kDa in size corresponding to <i>Borrelia burgdorferi</i> CRASP-2 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:	1:1,000
WB:	1:1,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.1 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

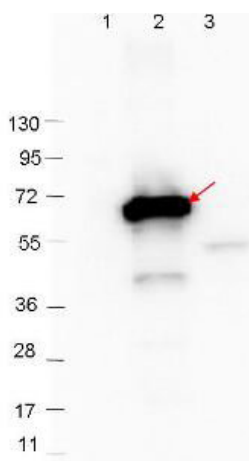
Shipping & Handling

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 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).

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.