Datasheet for ABIN964612

anti-Crasp-2 antibody

1 Image

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Overview

Quantity:	100 µg
Target:	Crasp-2
Reactivity:	Borrelia burgdorferi
Host:	Rabbit
Clonality:	Polyclonal
Application:	Lateral Flow (LF), Western Blotting (WB)

Product Details

Immunogen:	MBP-fusion protein corresponding to Borrelia burgdorferi CRASP-2 protein. Immunogen Type: RecombinantProtein
Isotype:	IgG
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-2 protein. A BLAST analysis was used to suggest reactivity with CRASP-2 from B. burgdorferi sources based on 100% homology with the immunizing sequence. Partial cross-reactivity is expected against B. garinii, B. spielmanii, and valaisiana sources based on 91-89% homology. Cross-reactivity with CRASP-2 from other sources has not been determined.
Characteristics:	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

Product Details

	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.
Purification:	purified
Sterility:	Sterile filtered

Target Details

Target:	Crasp-2
Alternative Name:	CRASP-2 (Crasp-2 Products)
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: Borrelia burgdorferi CRASP-2
Gene ID:	1194149
NCBI Accession:	NP_045500
UniProt:	O50665

Application Details

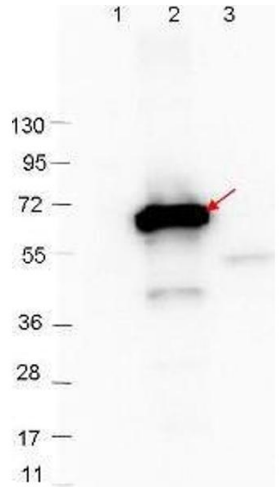
Application Notes:	This protein-A purified antibody has been tested for use in Western blotting. Specific conditions

Application Details

	for reactivity should be optimized by the user. Expect a band approximately 25.4 kDa in size corresponding to Borrelia burgdorferi CRASP-2 protein by Western blotting in the appropriate cell lysate or extract.
Comment:	Gene Name: cspZ, BB_H06
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Buffer: Restore with deionized water (or equivalent), Reconstitution Volume: 100 µL
Concentration:	1.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	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 date is one (1) year from date of opening.
Expiry Date:	12 months



Western Blotting

Image 1. 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 , 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 secondary antibody was used at 1:40,000 in ABIN925618 blocking buffer and imaged on the MP 4000 imaging system (Bio-Rad).

