

Product datasheet for **TA396885**

cspZ, BB_H06 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	WB: 1:1,000 ELISA: 1:1,000
Reactivity:	Borrelia burgdorferi
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	MBP-fusion protein corresponding to Borrelia burgdorferi CRASP-2 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-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.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Reconstitution Method:	Restore with deionized water (or equivalent) - Reconstitution Volume: 100 µL
Concentration:	1.0 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:	O50665



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Background:

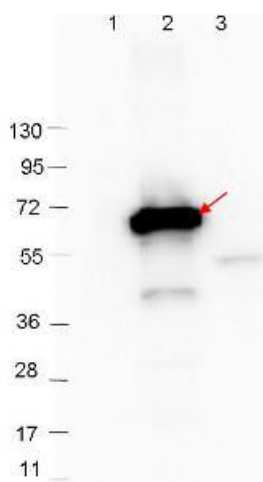
CRASP-2 (Complement Regulator-Acquiring Surface Protein 2) of *Borrelia burgdorferi* binds FHL-1 and factor H binding protein in a distinct way. It may be predominantly expressed by serum-resistant *Borrelia* strains. *Borrelia burgdorferi sensu lato* has the ability to evade immune systems to persist 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:

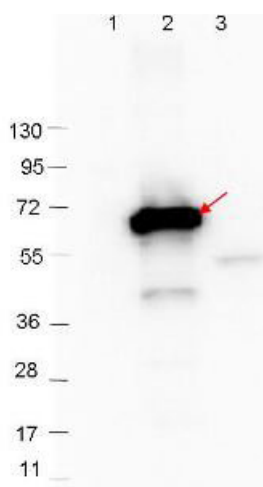
rabbit anti-CRASP-2 Antibody, *Borrelia burgdorferi* CRASP-2, CRASP2, CRASP 2

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 *Borrelia burgdorferi* CRASP-2 protein by Western blotting in the appropriate cell lysate or extract.

Product images:

Western Blot showing detection of 0.1 μ g 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 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).



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).