

## Anti-OspB [H6831] Bulk Size Ab03011-2.0-BT

**Isotype and Format:** Mouse IgG2a, Kappa

**Clone Number:** H6831

**Alternative Name(s) of Target:** Outer surface protein B

**UniProt Accession Number of Target Protein:** P17739

**Published Application(s):** IP, WB, ELISA, IF

**Published Species Reactivity:** *Borrelia burgdorferi*

**Immunogen:** The original antibody was generated by immunizing BALB/c mice with B31 strain of *Borrelia burgdorferi*.

**Specificity:** This antibody is directed against the C terminus of outer surface protein B (OspB), a major lipoprotein of the Lyme disease spirochete, *Borrelia burgdorferi*. This antibody binds an epitope topologically analogous to the LA-2 epitope of OspA and is centered around OspB Lys-253, a residue essential for recognition by H6831.

**Application Notes:** Indirect immunofluorescence was used to determine the reactivity of this antibody towards 14 strains of Lyme disease spirochetes. This antibody was also used for the immunoprecipitation of Shelter Island LD spirochete isolate (PMID: 6735474). This antibody capable of detecting *B. burgdorferi* B311 cell lysates in a western blot. (PMID: 6735474; 7513309). This antibody has an unusual property of having bactericidal effect even in the absence of complement or phagocytes. In time-kill studies, more than 99.9% of strain B31 *B. burgdorferi* cells were killed after 30 min of exposure to H6831 Fab fragments. It was reported that the whole IgG version of this antibody inhibited B311 cells but did not inhibit the growth of Osp-less B313 cells even at 25 mg/ml (PMID: 7890424). ELISA was used to check the bactericidal activity of this antibody towards whole cells of *B. burgdorferi* strain B311 after incubation with serial dilutions of this antibody (PMID: 7513309). This antibody was also used to identify its usability in a capture ELISA for detecting various isolates of *Borrelia burgdorferi* (PMID: 8432812).

**Antibody First Published in:** Barbour et al. Variation in a major surface protein of Lyme disease spirochetes. Infect Immun. 1984 Jul; 45(1): 94-100. [PMID:6735474](#)

**Note on publication:** Describes the generation of this antibody and mentions its use in the characterization of a surface antigen the contributes to the serotype specificity of Lyme disease spirochetes.

## Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:**

Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.