



# Rabbit Anti-B. burgdorferi OspA Polyclonal antibody (CABT-CS898)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	B. burgdorferi OspA
<b>Target</b>	B. burgdorferi OspA
<b>Immunogen</b>	MBP-fusion protein corresponding to Borrelia burgdorferi OspA protein.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	B. burgdorferi
<b>Purification</b>	Protein A
<b>Conjugate</b>	unconjugated
<b>Applications</b>	WB, ELISA, IF
<b>Format</b>	Lyophilized
<b>Size</b>	100 µg
<b>Buffer</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative</b>	0.01% (w/v) Sodium Azide
<b>Storage</b>	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.

# BACKGROUND

## Introduction

Outer-Surface Protein A (OspA), a lipoprotein from *Borrelia burgdorferi* encoded on its Plasmid lp54, is a major component of the spirochete's extracellular matrix. OspA probably serves as a lipid-anchor. The spirochetes migrate from the tick midgut during feeding to its salivary glands and are thus transmitted to the mammal host. This transition may be facilitated by changes in expression of some *B. burgdorferi* genes. Upon transmission of the spirochete from the Ixodes tick to mammalian host, the transcript level of OspA can change. It is believed that expression of the various proteins associated with the spirochete may be regulated by the changes in tick life cycle, changes in conditions during tick feeding (such as temperature, pH, and nutrients) and/or in coordination with the course of infection of the mammal host. *B. burgdorferi* can attach to (and also differentially express antigens in) diverse tissues within the vertebrate host and the tick vector, suggesting that physiological factors other than pH and temperature may play roles in modulating *B. burgdorferi* gene expression.

## Keywords

*B. burgdorferi* OspA; *Borrelia burgdorferi* OspA; *Borrelia burgdorferi*; *B. burgdorferi*; OspA