

Recombinant *B. burgdorferi* DbpA Protein, MBP-tagged

Cat. No. DbpA-03B Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant <i>Borrelia burgdorferi</i> DbpA protein produced in <i>E. coli</i> . Protein contains a MBP-tag and is visible on SDS-PAGE at 60.9 kDa for DbpA-MBP, (18.5 kDa for DbpA and 42.4 kDa for MBP)
Species	<i>Borrelia burgdorferi</i> B31
Source	<i>E. coli</i>
Description	<i>B. burgdorferi sensu stricto</i> has a linear plasmid (lp54) which carries a two-gene operon encoding two surface lipoproteins, DbpA and DbpB, both of which bind Decorin Binding Protein A (DbpA). It should be noted that other microbial DbpA's, such as <i>E. coli</i> (ATP-dependent RNA helicase DbpA), are significantly different to <i>Borrelia</i> DbpA. DbpA and DbpB are surface-exposed outer membrane lipoproteins that mediate the attachment of <i>Borrelia</i> to decorin, a major component of the host extracellular matrix, enabling bacteria to colonize mammalian tissues. Both can mediate interaction with the glycosaminoglycans (GAGs) heparin and dermatan sulfate, but only DbpB binds chondroitin sulfate.
Form	Liquid, 0.2 µm filter sterilised.
Molecular Mass	60.9 kDa for DbpA-MBP, (18.5 kDa for DbpA and 42.4 kDa for MBP)
Purity	> 90%
Storage	Short term: +2 to +8 centigrade

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Long Term: -80 centigrade
Can be frozen, but avoid multiple freeze/thaw cycles

Concentration 1.0 mg/mL by UV absorbance at 280 nm

Storage Buffer 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 and 0.01% (w/v) Sodium Azide.

GENE INFORMATION

Gene Name [dbpA decorin-binding protein DbpA \[Borreliella burgdorferi B31 \]](#)

Official Symbol [dbpA](#)

Synonyms dbpA; decorin-binding protein DbpA

Gene ID [1194347](#)

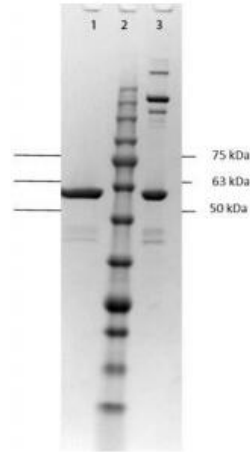
Protein Refseq [WP_010890380](#)

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**SDS-PAGE of DbpA
Protein**



Lane 1: 1X Reduced DbpA.

Lane 2: Opal Pre-Stained Molecular Weight Marker.

Lane 3: 1X Non-Reduced DbpA. 4-20% SDS-PAGE; Coomassie Stained.

Expected band at ~60.9 kDa for DbpA-MBP fusion protein.

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