

## 32-13564: *Borrelia* p58

### Alternative Name :

*Borrelia* belongs to a genus of bacteria of the spirochete phylum. *Borrelia* causes borreliosis, which is a zoonotic, vector-borne disease transmitted mainly by ticks and some by lice, depending on the species. Of the 36 known species of *Borrelia*, 12 are distinguished to cause Lyme disease or borreliosis and are transmitted by ticks. The main *Borrelia* species causing Lyme disease are *Borrelia burgdorferi*, *Borrelia afzelii*, and *Borrelia garinii*. The *Borrelia* genus members have a linear chromosome which is about 900 kbp in length as well as an excess of both linear and circular plasmids in the 5-220 kbp size range. The plasmids are atypical, as compared to most bacterial plasmids, since they contain many paralogous sequences, a large number of pseudogenes and, in some cases, essential genes. Moreover, a number of the plasmids have features suggesting that they are prophages.

### Description

Source: *Escherichia Coli*.

Sterile Filtered clear solution.

*Borrelia* belongs to a genus of bacteria of the spirochete phylum. *Borrelia* causes borreliosis, which is a zoonotic, vector-borne disease transmitted mainly by ticks and some by lice, depending on the species. Of the 36 known species of *Borrelia*, 12 are distinguished to cause Lyme disease or borreliosis and are transmitted by ticks. The main *Borrelia* species causing Lyme disease are *Borrelia burgdorferi*, *Borrelia afzelii*, and *Borrelia garinii*. The *Borrelia* genus members have a linear chromosome which is about 900 kbp in length as well as an excess of both linear and circular plasmids in the 5-220 kbp size range. The plasmids are atypical, as compared to most bacterial plasmids, since they contain many paralogous sequences, a large number of pseudogenes and, in some cases, essential genes. Moreover, a number of the plasmids have features suggesting that they are prophages.

Recombinant *Borrelia Burgdorferi* p58 produced in *E.coli* is a non-glycosylated, polypeptide chain having a calculated molecular mass of 59,815 Dalton. *Borrelia* p58 is expressed with a 10xHis tag at N-terminus and purified by proprietary chromatographic techniques.

### Product Info

<b>Amount :</b>	5 µg / 20 µg
<b>Purification :</b>	Greater than 80.0% as determined by SDS-PAGE.
<b>Content :</b>	<i>Borrelia</i> p58 is supplied in 20mM HEPES buffer pH-7.6, 250mM NaCl and 20% glycerol.
<b>Storage condition :</b>	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles.