

ZEUS ELISA™

Borrelia VlsE1/pepC10 IgG/IgM Test System



Lyme disease is the most common tick-borne disease in the Northern Hemisphere, and is caused by infection with *Borrelia*, a group of spirochetal bacteria commonly transferred from tick bites. Serological evidence of exposure is an important aid in the diagnosis of Lyme disease, and the development of recombinant and synthetic antigens has brought about second generation assays with improved clinical specificity and sensitivity¹.

Assays with purified recombinant or synthetic antigens confer several advantages over whole cell lysate assays, including the ability to:

- Select specific antigens
- Combine homologous antigens from different infectious strains
- Design truncated antigens for greater specificity
- Utilize antigens primarily expressed *in vivo*
- **Reduce false positive results, thereby minimizing the need for second-tier testing, as well as the overall cost burden of healthcare.**

Two antigens are better than one.

- **Why VlsE1?** The VlsE1 protein has several immunodominant epitopes, including C6, which can improve clinical diagnostic sensitivity¹.
- **Why pepC10?** pepC10 is a peptide derived from Outer Surface Protein C (OspC), which is the immunodominant antigen of the IgM response in Lyme disease. Detection of IgM antibodies to pepC10 can be especially helpful in the diagnosis of acute Lyme disease².
- **The VlsE1/pepC10 is ideal for serodiagnosis of major infectious European Lyme disease (*B. afzelii*, *B. garinii*, *B. burgdorferi*).** (See Figure 1)³

**Test with confidence.
Test with ZEUS.**

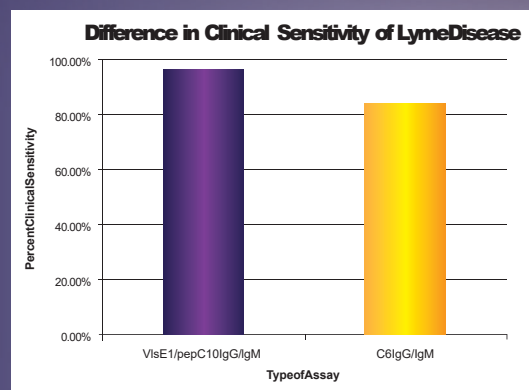


Figure 1. In 64 cases of Lyme disease, the combination of VlsE1 and pepC10 detected 62/64 (96.8%) as positive whereas C6 alone detected 53/64 (82.8%) as positive².

Product Features

- **Achieves superior clinical sensitivity and specificity** by testing two antigens, VlsE1 + pepC10, in the same well.
- **Yields excellent assay reproducibility** using highly purified and specific antigens.
- **Adapts to your workflow** with flexibility for manual, semi-automated, or fully-automated operation.
- **Allows for maximum efficiency and reliability** using the ZEUS universal ELISA protocol and common reagents, including SAVE® Diluent for sample addition verification.

Ordering Information

Catalog No:	Product Description
3Z9661	<i>Borrelia</i> VlsE1/pepC10 IgG/IgM Test System (96 tests)

1. Wilske, B., et al. 2007. Microbiological and serological diagnosis of Lyme borreliosis. FEMS Immunol Med Microbiol 49:13-21.
2. Bacon, R., et al. 2003. Serodiagnosis of Lyme Disease by Kinetic Enzyme-Linked Immunosorbent assay Using Recombinant VlsE1 or Peptide Antigens of *Borrelia burgdorferi* Compared with 2-Tiered Testing using Whole-Cell Lysate. J Infect Dis. 187:1187-1199.
3. DiBernardo, A., et al. Laboratory evaluation of the performance of the ZEUS PEPC10/VlsEELISA to detect antibodies to members of the European genospecies of *Borrelia burgdorferi sensu lato*. Public Health Ontario.

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