



# Borrelia Diagnostics

## ELISA and LINE Immunoblots

Lyme disease or borreliosis is caused by the spirochete bacterium *Borrelia burgdorferi* and is transmitted to humans by the bite of infected ticks. In Europe, at least 3 species are known to be responsible for causing human disease: *B. burgdorferi sensu stricto*, *B. garinii*, and *B. afzelii*.

Diagnosis of Lyme disease is based on clinical evaluation together with laboratory support, where serology is the test of first choice. Gold Standard Diagnostics is offering multiple solutions to laboratories with its five ELISA and six Immunoblot kits which provide the necessary screening and confirmation tools for an accurate diagnosis.

### Main Features

- Excellent sensitivity and specificity
- Validated for cerebrospinal fluid (CSF) testing
- Automatable solutions
- Fast, simple, and convenient procedures
- All products are CE marked

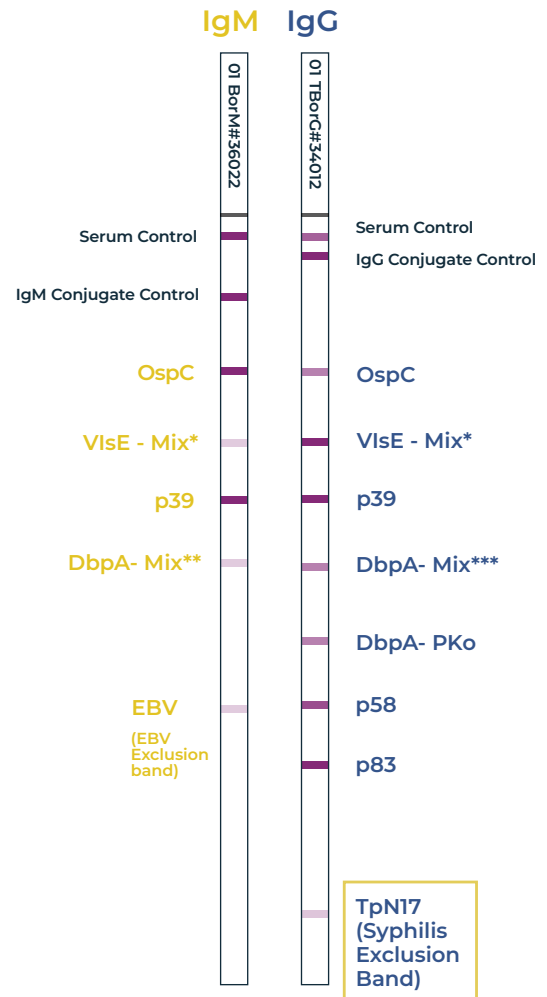
# LINE Immunoblots

**Borrelia Europe LINE (IgG, IgM) WE224G, WE224M**

**Borrelia Europe + TpN17 LINE (IgG) WE225G**

## Advantages:

- Optimized **combination of native**, highly purified, and **recombinant** *B. burgdorferi s.l.* antigens
- Antigen combination of all **important human pathogenic** genospecies, including *B. spielmanii* and *B. bavariensis*
- Use of the national Reference Center (NRZ) published *B. bavariensis* (PBi)-p58 antigen
- **DbpA** antigen combination of several Borrelia genospecies
- **VisE** of two genospecies
- **Exclusion marker for EBV primary infection**
- Additional **exclusion marker** for a **Syphilis infection** on the Borrelia Europe + TpN17 LINE
- Easy reading & interpretation, also with the **LabImage LA® software**



(\*) *B. burgdorferi s.s.* (B31) and *B. garinii* (Ip90) (3)

(\*\*) *B. garinii* (PBr), *B. bavariensis* (PBi) (4), *B. spielmanii* (A14S) (1,2,3) and *B. afzelii* (PKo)

(\*\*\*) *B. garinii* (PBr), *B. bavariensis* (PBi) (4) and *B. spielmanii* (A14S) (1,2,3)

## Literature:

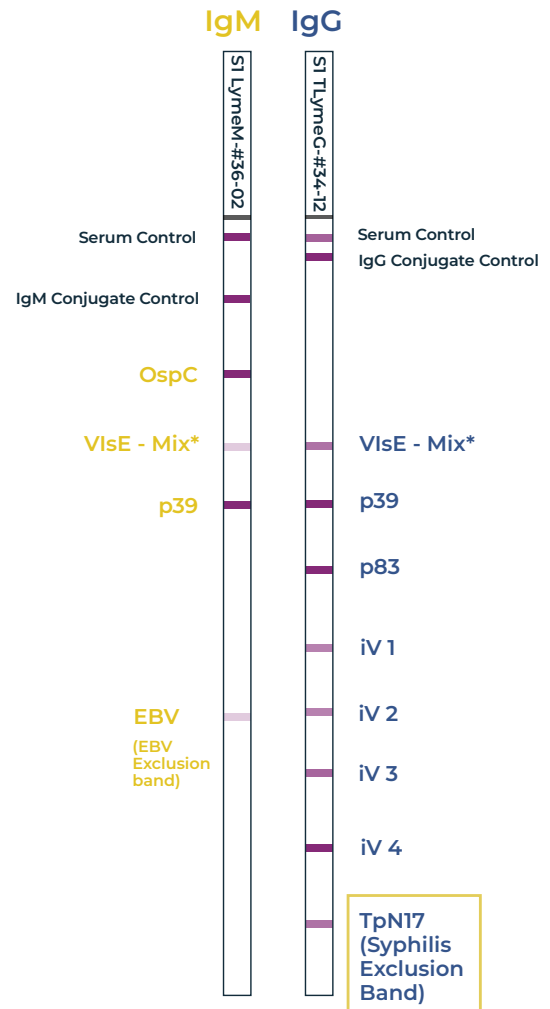
- (1) Wilske, B. *et al.*, Med. Microbiol. Immunol. (1999); 188: 139-144; (2) Schulte-Spechtel, U. *et al.*, IJMM 296 (2006) S1, 250-266; (3) Goettner, G. *et al.*, Journal of Clinical Microbiology, Aug. 2005, p. 3602-3609; (4) Schulte-Spechtel, U. *et al.*, Journal of Clinical Microbiology, Mar. 2003, p. 1299-1303; (5) Margos G. *et al.*, American Society for Microbiology June 2009

# Borrelia in vivo LINE (IgG, IgM) WE222G, WE222M

## Borrelia in vivo + TpN17 LINE (IgG) WE223G

### Advantages:

- Optimized **combination of native**, highly purified and **recombinant** *B. burgdorferi s.l.* antigens
- **VisE** of two genospecies
- **Exclusion marker for EBV primary infection**
- Additional **exclusion marker** for a **Syphilis infection** on the *Borrelia in vivo* + TpN17 LINE
- Easy reading & interpretation, also with the **LabImage LA® software**
- *In vivo* antigens **BBA36, BB0323, CRASP-3, pG mix (pG ZS7, pG MMS)** exclusively from us



(\*) *B. burgdorferi s.s.* (B31) and *B. garinii* (Ip90) (1)

### Literature:

(1) Schulte-Spechtel, U. et al., Journal of Clinical Microbiology, Mar. 2003, p. 1299-1303

# Borrelia Diagnostics

## ELISA and LINE Immunoblots

### ELISA

All kits are validated for **CSF diagnostics**.

Order No.	Product description	Format
EC022G00 EC022L60 EN022L65	<b>Borrelia + VlsE IgG</b> <b>Borrelia + VlsE IgG CSF Standards</b> <b>Borrelia + VlsE IgG CSF AI Control Set</b> <i>Antigen mix of B. afzelii strain PKo, B. garinii strain PBr, B. burgdorferi strain ZS7 and recombinant VlsE for highest sensitivity and specificity.</i>	96 tests 4 x 1 ml 4 x 1 ml
EC024G00 EC022L60 EN022L65	<b>Borrelia + VlsE IgG Europe</b> <b>Borrelia + VlsE IgG CSF Standards</b> <b>Borrelia + VlsE IgG CSF AI Control Set</b> <i>Antigen mix of B. afzelii strain PKo, B. garinii strain PBr, B. burgdorferi strain ZS7 and recombinant VlsE for highest sensitivity and specificity. Increased specificity through special cut off setting.</i>	96 tests 4 x 1 ml 4 x 1 ml
EC022M00 EC022L80	<b>Borrelia IgM</b> <b>Borrelia IgM CSF Standards</b> <i>Antigen mix of B. afzelii strain PKo for high sensitivity (OspC antigen), B. garinii strain PBr and B. burgdorferi strain ZS7.</i>	96 tests 4 x 1 ml
BORG0040	<b>Borrelia burgdorferi IgG</b> <i>Antigen mix of B. burgdorferi sensu stricto and B. afzelii strains for high sensitivity and specificity. Recombinant B. burgdorferi antigens (VlsE, p100, BmpA and DbpA). IFU for CSF available upon request.</i>	96 tests
BORM0040	<b>Borrelia burgdorferi IgM</b> <i>Antigen mix of B. burgdorferi sensu stricto and B. afzelii strains for high sensitivity and specificity. Recombinant B. burgdorferi antigen OspC. IFU for CSF available upon request.</i>	96 tests

### LINE IMMUNOBLOTS

All Borrelia LINE Immunoblots are **MIQ 12/2017 conform** (Mikrobiologisch-Infektiologische Qualitätsstandards) and validated for **CSF diagnostics**.

Order No.	Product description	Format
WE225G32/96 WN225K60	<b>Borrelia EU + TpN17 IgG LINE-32/96</b> <b>Borrelia EU + TpN17 IgG LINE Ctrl-Set</b>	32/96 tests 3 x Ctrl (pos, neg, cut off)
WE224G32/96 WN224K80	<b>Borrelia EU IgG LINE-32/96</b> <b>Borrelia EU IgG LINE Ctrl-Set</b>	32/96 tests 3 x Ctrl (pos, neg, cut off)
WE224M32/96 WN224K80	<b>Borrelia EU IgM LINE-32/96</b> <b>Borrelia EU IgM LINE Ctrl-Set</b>	32/96 tests 3 x Ctrl (pos, neg, cut off)
WE223G32/96 WN223K60	<b>Borrelia in vivo + TpN17 IgG LINE-32/96</b> <b>Borrelia in vivo + TpN17 IgG LINE Ctrl-Set</b>	32/96 tests 3 x Ctrl (pos, neg, cut off)
WE222G32/96 WN222K60	<b>Borrelia in vivo IgG LINE-32/96</b> <b>Borrelia in vivo IgG LINE Ctrl-Set</b>	32/96 tests 3 x Ctrl (pos, neg, cut off)
WE222M32/96 WN222K80	<b>Borrelia in vivo IgM LINE-32/96</b> <b>Borrelia in vivo IgM LINE Ctrl-Set</b>	32/96 tests 3 x Ctrl (pos, neg, cut off)

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**Not available in the U.S.** Contact your local representative for more details.

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