



Quelle: www.fotolia.com

# CSF\* Diagnostic

## ELISA

Ready to use standards  
Fix standard curve  
AI<sup>+</sup> controls

## LINE

Assurance of the diagnosis  
Reasonable supplement for  
the AI detection of Borrelia



(Quelle: www.fotolia.com)

## Responsible Diagnostic & Practical Procedure

- ▼ 4 Ready to use CSF Standards or VIROTECH Diagnostics internal evaluated values for a fix standard curve
- ▼ Parallel CSF-/Serum procedure on one plate (incl. serology)
- ▼ Software based calculation of the CSF data
- ▼ User friendly serum-/CSF dilutions for all parameters (initial dilution: serum: 1:400 / CSF: 1:2)
- ▼ Antibody-Index-Controls available
- ▼ Borrelia CSF LINE Immunoblot

# CSF Standards

## 4 Ready to use CSF Standards to create a standard curve

Borrelia afzelii+VlsE IgG

Borrelia afzelii IgM

CMV IgG

EBV IgG

HSV Screen IgG

HSV 1 (gG1) IgG

HSV 2 (gG2) IgG

Measles IgG/IgM

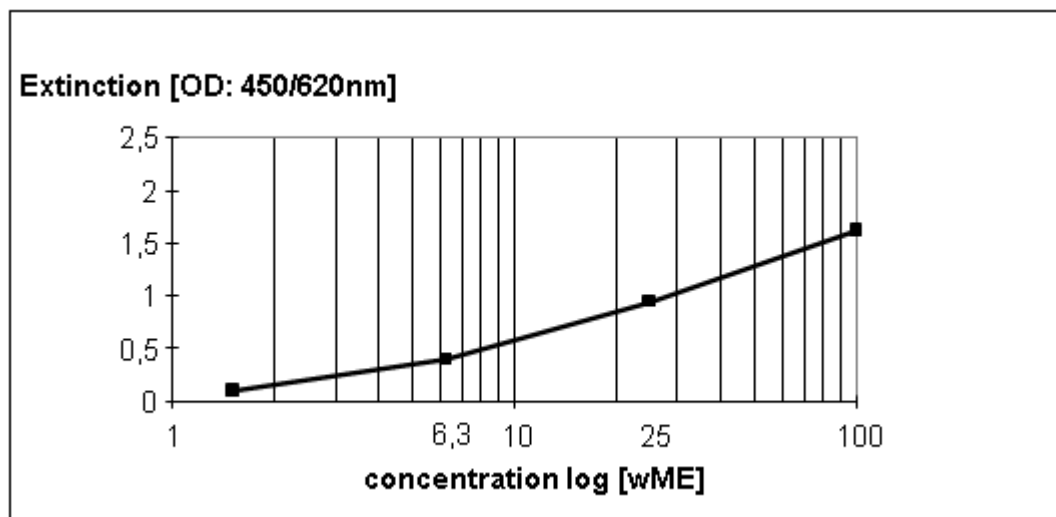
Mumps IgG

FSME/TBE IgG/IgM

VZV IgG/IgM/IgA

Rubella Virus IgG

## Example of a CSF standard curve



.....or use the values of the individual standards measured by  
**VIROTECH** to create a fixed standard curve

**CSF STDC** Werte zum Auswerten mit der Festen Liquor-Standardkurve / Values for the calculation with the Permanent CSF-Standard Curve

wMe	1,5	6,2	25	100
IgG OD	0,12	0,41	0,99	1,67

**Make your Choice!**

# Antibody-Index-Control

The determination of the antibody index (AI) is intended to detect a synthesis of pathogen-specific antibodies in the central nervous system. It is calculated out of the relation between the pathogen specific antibody quotient of CSF and serum and the corresponding total immunoglobulin quotient of CSF and serum:

## Advantages of the Antibody-Index-Control

- ▼ Verification of the **accuracy and precision** of the AI determination
- ▼ **Internal quality control** in the daily CSF routine diagnostic
- ▼ Ready to use CSF/serum control pairs for the **normal range (AI<1,5)**
- ▼ Ready to use CSF/serum control pairs for the **pathologic range (AI>1,5)**
- ▼ Calculation of the internal quality control using the interpretation software LabCheck (Order No.: S/RILIBAEK)
- ▼ All required information on one Quality Control Certificate

### QUALITÄTSKONTROLL-ZERTIFIKAT QUALITY CONTROL CERTIFICATE CERT

**Borrelia afzelii + VlsE ELISA**  
**B. afzelii + VlsE Europe ELISA**  
**IgG Liquor Antikörper Index Kontrollen**

CSF AI	022	E
CSF AI	024	E

Kit		MTP Platte/ Plate	
REF	EN022L65	REF	EC022G01
LOT	12581-01	LOT	128
	2013/08		
IgG			
	CSF AI (<1,5)		CSF AI (≥1,5)
	CSF AI L1	CSF AI S1	CSF AI S2
LOT	12581	12581	12581
REF	102242	102244	102243
	2013/08	2013/08	2013/08
AI	0,6 – 1,4		2,0 – 4,2
ZW	0,9		2,8
IgG CONC T	CSF: 25 mg/l		CSF: 40 mg/l
Gesamt Konzentration / total concentration	SERUM: 8928 mg/l		SERUM: 12698 mg/l
IgG Q	Q = 2,8 x 10 <sup>-3</sup>		Q = 3,15 x 10 <sup>-3</sup>
Quotient IgG-Gesamt / total IgG quotient			
ALB CONC T	CSF: 210 mg/l		CSF: 210 mg/l
Gesamt Konzentration / total concentration	SERUM: 41700 mg/l		SERUM: 41700 mg/l
ALB Q	Q = 5,0 x 10 <sup>-3</sup>		Q = 5,0 x 10 <sup>-3</sup>
Quotient Albumin-Gesamt / total albumin quotient			

## Available for:

- ▼ B. afzelii + VISE IgG
- ▼ EBV IgG
- ▼ FSME/TBE IgG
- ▼ HSV Screen IgG
- ▼ Measles IgG
- ▼ Rubella IgG
- ▼ VZV IgG

# Borrelia LINE

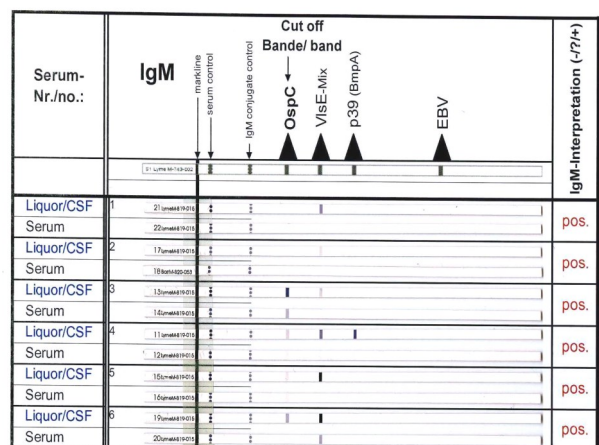
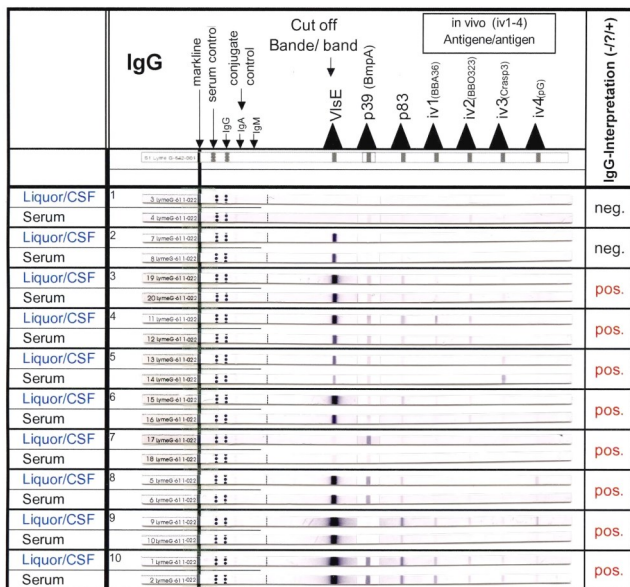
## The reasonable supplement for the CSF Diagnostic

Beside the serodiagnosis of Lyme borreliosis the IgG/IgM LINE Immunoblots are also suitable for the diagnosis of neuroborreliosis in CSF. Together with prior determination of the AI by ELISA, they serve as an additional approach to determine the endogenous (intrathecal) synthesis of pathogen specific antibodies to *Borrelia burgdorferi* sensu lato, and thus help to support the diagnosis of neuroborreliosis. Moreover, polyspecific intrathecal antibody synthesis must be considered.

### Borrelia specific intrathecal synthesis of IgG/IgM antibodies is present if

- ▼ One or several bands are visible only on the CSF strip, but not on the serum strip
- ▼ One or several bands on the CSF strip appear more intense than on the serum strip

### Examples of the IgG- and IgM-Diagnostic



### CSF LINES are available for:

#### Borrelia LINE IgG/IgM

Order No: WE222G32/M32

Order No: WE222G96/M96

#### Borrelia Europe plus TpN17 LINE IgG

Order No: WE225G32/G96

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#### Borrelia Europe LINE IgG/IgM

Order No: WE224G32/M32

Order No: WE224G96/M96

\* Cerebrospinal Fluid

\* Antibody-Index