

Healthy endemic control sera datasets (#subjects)		Band Frequency											IgG FP Rate (%)
IgG immunoblot band kDa (B31 strain)	93(a)	66	58	45	41	39	34	31	30	28	23(b)	18	
Immunetics QualiCode Western blot 510(k) (278)	0.13	0.24	0.1	0.07	0.93	0.13	0.1	0.12	0.11	0.01	0.11	0.1	0.7
EUROIMMUN Western blot 510(k) (98)	0.1	0.14	0.14	0.06	0.84	0.04	NA	NA	0.07	0.01	0.03	0.1	3.1
MarDx Marblot Western blot 510(k) (291)*	0.03	0.04	0.12	0.01	0.8	0.27	NA	NA	0.01	0	0.04	0	1*
MarDx Marblot Western blot (Trevejo) (38)	0.05	0.08	0.03	0.05	0.66	0.05	0	0	0	0.03	0	0.05	2.6
MarDx Marblot Western blot (LSR) (101)	0.01	0.08	0.08	0.03	0.37	0.03	NA	NA	0.02	0	0.09	0.04	2
Trinity Biotech MarStripe line blot 510(k) (219)*	0.02	0.04	0.01	0	0.06	0.18	NA	NA	0.01	0.01	0.03	0.01	0.5*
Viramed ViraStripe line blot (LSR) (101)	0.1	0.39	0.18	0	0.54	0.05	NA	NA	0.03	0.02	0.15	0.1	4
Gold Standard Diagnostics Line blot 510(k) (119)	0.04	0.01	0.06	0.04	0.33	0.06	NA	NA	0.02	0.01	0.05	0.05	1.7
IgM immunoblot band kDa (B31 strain)	93(a)	41	39	34	31	23(b)							IgM FP Rate (%)
Immunetics QualiCode Western blot 510(k) (279)	NA	0.3	0.03	NA	NA	0.06							4.7
EUROIMMUN Western blot 510(k) (98)	NA	0.84	0.04	NA	NA	0.03							5.1
MarDx Marblot Western blot 510(k) (291)*	NA	0.21	0.03	NA	NA	0.09							5*
MarDx Marblot Western blot (Trevejo) (38)	0.05	0.05	0.08	0	0.03	0.11							2.6
MarDx Marblot Western blot (LSR) (101)	NA	0.05	0	NA	NA	0.23							2
Trinity Biotech MarStripe line blot 510(k) (220)*	NA	0.01	0.01	NA	NA	0.02							0.5*
Viramed ViraStripe line blot LSR (101)	NA	0.17	0.2	NA	NA	0.08							11.9
Gold Standard Diagnostics line blot 510(k) (119)	NA	0.01	0.02	NA	NA	0.04							0

Legend: FP, false-positive; LSR, CDC Lyme Serum Repository samples; kDa, kilodaltons; 510(k), medical device application to FDA

(a) Reports 83- to 100-kDa molecular weight band

(b) Reports 21- to 25-kDa molecular weight band (OspC)

*includes both endemic and non-endemic controls

NOTE: See text and Supplementary File S2 for dataset descriptions