

Healthy non-endemic control sera datasets (#subjects)				Band Frequency									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) (151)	0.1	0.17	0.07	0.05	0.93	0.07	0.13	0.21	0.16	0.05	0.14	0.05	4
EUROIMMUN Western blot 510(k) (100)	0.08	0.16	0.05	0.04	0.87	0.02	NA	NA	0.13	0	0.02	0.09	0
MarDx Marblot Western blot (LSR) (102)	0	0.02	0.04	0.04	0.29	0.02	NA	NA	0	0.01	0.01	0.01	0
Viramed ViraStripe line blot (LSR) (102)	0.06	0.28	0.07	0.1	0.66	0.04	NA	NA	0.03	0.04	0.28	0.15	1
Gold Standard Diagnostics line blot 510(k) (115)	0.03	0.03	0.04	0.03	0.25	0.04	NA	NA	0.01	0.01	0.02	0	0
IgM immunoblot band kDa (B31 strain)	41	39	23(b)										
Immunetics QualiCode Western blot 510(k) (151)	0.21	0.01	0.05										4
EUROIMMUN Western blot 510(k) (98)	0.87	0.02	0.02										4
MarDx Marblot Western blot (LSR) (102)	0.1	0.03	0.2										2
Viramed ViraStripe line blot (LSR) (102)	0.28	0.23	0.25										3.9
Gold Standard Diagnostics line blot 510(k) (115)	0.03	0.01	0.07										0

Legend: FP, false-positive; LSR, CDC Lyme Serum Repository; kDa, kilodalton; 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)

Note: see text and Supplementary File S2 for dataset descriptions