

Table 1 Comparison of 3B-cCLIA with 3A+3B-cCLIA, 3ABC-bELISA and PrioCHECK

FMDV NSP ELISA for the detection of NSP antibodies in sera from naïve, vaccinated and infected animals.

Sample source	Total No. samples	3B-cCLIA			3A+3B-cCLIA			3ABC-bELISA			PrioCHECK® NSP		
		P ^a	N ^b	Accuracy rate	P ^a	N ^b	Accuracy rate	P ^a	N ^b	Accuracy rate	P ^a	N ^b	Accuracy rate
Naïve swine	310	1	309	99.68%	1	309	99.68%	2	308	99.35%	0	310	100.00%
Vaccinated swine with multiple-epitope recombinant vaccine	100	1	99	99.00%	1	99	99.00%	1	99	99.00%	0	100	100.00%
Infected swine	107	104	3	97.20%	105	2	98.13%	102	5	95.33%	91	16	85.05%
Naïve bovine	175	1	174	99.43%	1	174	99.43%	2	173	98.86%	0	175	100.00%
Infected bovine	70	67	3	95.71%	67	3	95.71%	66	4	94.29%	63	7	90.00%
Naïve sheep	61	1	60	98.36%	1	60	98.36%	2	59	96.72%	0	61	100.00%
Infected sheep	52	50	2	96.15%	50	2	96.15%	51	1	98.08%	48	4	92.31%
Vaccinated sows with commercial O/A divalent vaccine (3–15 times)	120	1	119	99.17%	1	119	99.17%	3	117	97.50%	0	120	100.00%
Vaccinated dairy cows with commercial O/A divalent vaccine (2–10 times)	129	12	117	90.70%	13	116	89.92%	19	110	85.27%	15	114	88.37%
Vaccinated sheep with O, A or Asia 1 univalent inactivated vaccine (1–3 times)	77	5	72	93.51%	4	73	94.81%	6	71	92.21%	2	75	97.40%
Swine in the field	173	13	160		14 (13)	159 (159)	99.42% ^c	15 (11)	158 (156)	96.53% ^c	9 (7)	164 (158)	95.37% ^c

^aPositive, ^bNegative

^cThe coincidence rate of PI value of 3B-cCLIA with those of 3A+3B-cCLIA, 3ABC-bELISA, and PrioCHECK FMDV NSP

ELISA in testing field sera collected from swine was 99.42% (172/173), 96.53% (167/173), and 95.37% (165/173), respectively.

Table 2 Antibody to FMDV NSP in sera from cattle and sheep collected following repeated vaccination

Sample source	Total No. samples	3B-cCLIA			3A+3B-cCLIA			3ABC-bELISA			PrioCHECK® NSP		
		P ^a	N ^b	False-positive rate	P ^a	N ^b	False-positive rate	P ^a	N ^b	False-positive rate	P ^a	N ^b	False-positive rate
Vaccinated dairy cows with commercial O/A divalent vaccine (2 times)	30	1	29	3.33%	1	29	3.33%	1	29	3.33%	1	29	3.33%
Vaccinated dairy cows with commercial O/A divalent vaccine (5 times)	33	2	31	6.06*	2	31	6.06*	3	30	9.09%	3	30	9.09%
Vaccinated dairy cows with commercial O/A divalent vaccine (10 times)	66	9	57	13.64%	10	56	15.15%	15	51	22.73%	11	55	16.67%
Vaccinated sheep with O, A or Asia 1 univalent inactivated vaccine (1 time)	29	0	29	0%	1	28	3.45%	0	29	0%	0	29	0%
Vaccinated sheep with O, A or Asia 1 univalent inactivated vaccine (2 times)	30	2	28	6.67%	1	29	3.33%	1	29	3.33%	0	30	0%
Vaccinated sheep with O, A or Asia 1 univalent inactivated vaccine (3 times)	18	3	15	16.67%	2	16	11.11%	5	13	27.78%	2	16	11.11%

^aPositive, ^bNegative