

PRRS Ab ELISA 4.0

Porcine Reproductive and Respiratory Syndrome antibody

Porcine reproductive and respiratory syndrome (PRRS) is characterized by reproductive failure of sows and respiratory problems of piglets and growing pigs. The disease is caused by PRRS virus, currently classified as a member of family Arteriviridae, genus Arterivirus. The primary target cell of the virus is alveolar macrophage of pigs. Two major types of the virus exist, the European (EU) and the North America (NA) strain. The virus is primarily transmitted by contaminated feces, urine, semen and infected pigs. High level of sanitary management system is required because fomite infection is also possible.



Indications

- Routine monitoring of PRRS
- PRRS diagnosis of non-vaccinated group
- Titer check after vaccination

Special Features

- No singleton reactor (false positive)
- Antibodies against European strain, North America strain and Korean strain can be detected
- No cross reaction with other swine disease positive sera
- Specimen: Plasma, Serum
- Reading time: 75 minutes
- Sensitivity: 98.7% vs. IFA
- Specificity: 99.7% vs. IFA

Quick Procedure

1. Prepare antigen coated micro assay plate
2. Dilute test samples and controls with sample diluent (1:39 dilution)
3. Add 100 µl of diluted samples and controls to wells
4. Incubate plate for 30 minutes at room temperature
5. Wash plate 5 times
6. Add 100 µl of enzyme conjugate to wells
7. Incubate plate for 30 minutes at room temperature
8. Wash plate 5 times
9. Add 100 µl of substrate solution and incubate for 15 minutes at room temperature in dark
10. Add 100 µl of stop solution
11. Measure the optical density (OD) at 450 nm with reference wavelength at 620 nm
12. $S/P \text{ value} = \frac{[OD_{\text{sample}} - \text{mean } OD_{\text{NC}}]}{[\text{mean } OD_{\text{PC}} - \text{mean } OD_{\text{NC}}]}$

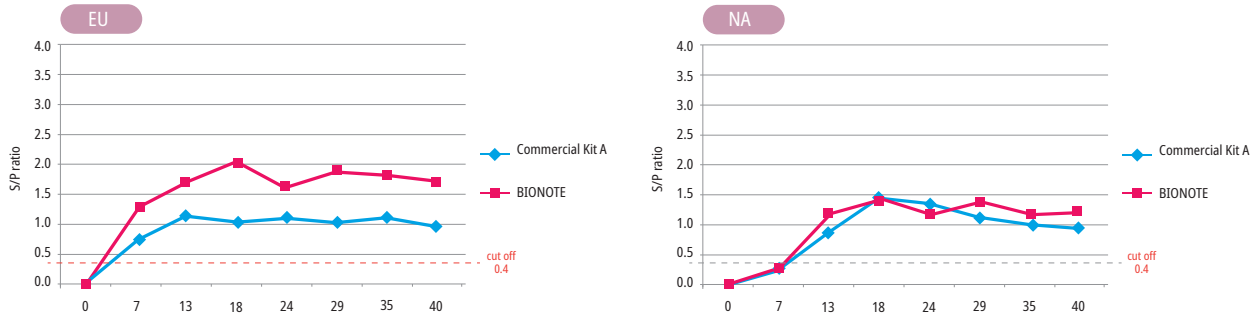
Sensitivity and specificity study

-BIONOTE PRRS Ab ELISA 4.0 has high sensitivity, 98.7% and high Specificity, 99.7%

		BIONOTE PRRS Ab ELISA 4.0		
		Positive	Negative	Total
IFA	Positive	324	4	328
	Negative	1	333	334
	Total	325	337	662

Seroconversion study after challenge of PRRSV

1) Antibody response after challenge with PRRS EU, NA strain

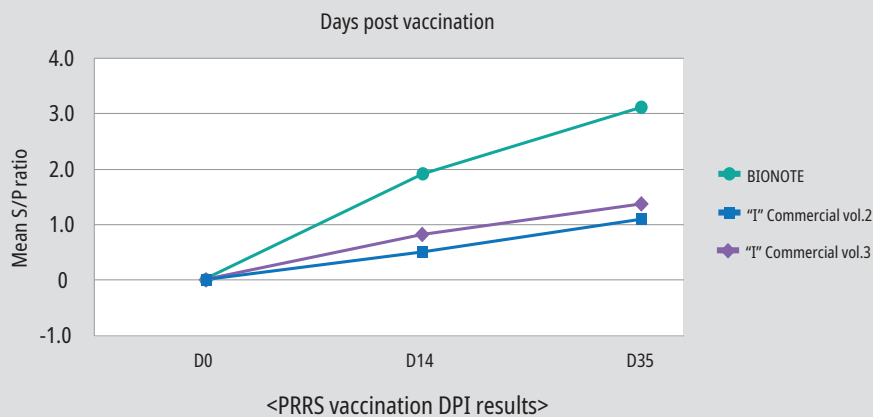


* BIONOTE PRRS Ab ELISA 4.0 can detect PRRS Ab from DPI 7 with PRRS EU and NA strain

Compare with other commercial ELISA

Product	BIONOTE	"I" Commercial vol.2	"I" Commercial vol.3
Test well No. for 1 sample	1 Well	2 Well	1 Well
Time	Incubation 30 min.	Incubation 30 min.	Incubation 30 min.
Cut off value	S/P 0.4	S/P 0.4	S/P 0.4
Singleton reactor	No	Yes	No

BIONOTE PRRS Ab ELISA Kit is more sensitive than others
 Detection period is earlier than "I" commercial ELISA with no singleton reactor



Ordering Information

Cat. No.	Description	Type	Packing size
EB4404PO	PRRS Ab ELISA 4.0	Microplate	480 Wells/Kit