

Adia^X Lyo EU/NA PRRSV

ADIALYO_PRRS_PP01_(EN)_V03
11/04/2024

The new freeze-dried reference for the quantitative diagnosis of porcine EU/NA PRRSV

i A BRIEF OUTLOOK ON THE DISEASE

The agent responsible for the **Porcine Reproductive and Respiratory Syndrome (PRRS)** is a RNA virus of the Arteriviridae family. It causes one of the major diseases affecting pigs with significant economic impact worldwide. The virus can be divided into two classes:

- **PRRSV I (European or EU strains)**
- **PRRSV II (North America or NA strains)**

Two symptoms are predominant: **reproductive disorders** (premature abortions, abnormal prolongation of the gestation period, high neonatal mortality, reduced fertility) and **respiratory disorders** associated with loss of appetite and hyperthermia.

☰ PROTOCOL FOR PCR TESTING OF EU/NA PRRSV



Primers modified according to the **international context** for an optimal sensitivity (detection of new variants like the Chinese HP strain and the Spanish Rosalia strain)



Amplification and quantification **in 1 hour** only by using the calibrated control provided



Possibility of performing a **simultaneous PCR search** of EU and NA PRRSV from the same extraction



Fast and quantitative method to modulate the sequencing needs of identified strains



ADIALYO™ EU/NA PRRSV

First quantitative freeze-dried PCR tests for the detection of EU/NA PRRSV:



Constraint-free shipping



Environment friendly products



Stable at +4°C



*Do not
compromise
between
performance
and simplicity*



« ADIALYO™ EU/NA PRRSV sets the new reference for a worldwide fast and reliable PCR detection in compliance with environmental concerns. »





CHARACTERISTICS OF THE ADIALYO™ EU/NA PRRSV PCR KIT

Triplex kit ready-to-use for :

- EU PRRSV (FAM) / NA PRRSV (CY5) / Endogenous internal control (HEX)
- CTL + calibrated

High specificity and sensitivity for the detection of PRRSV strains:

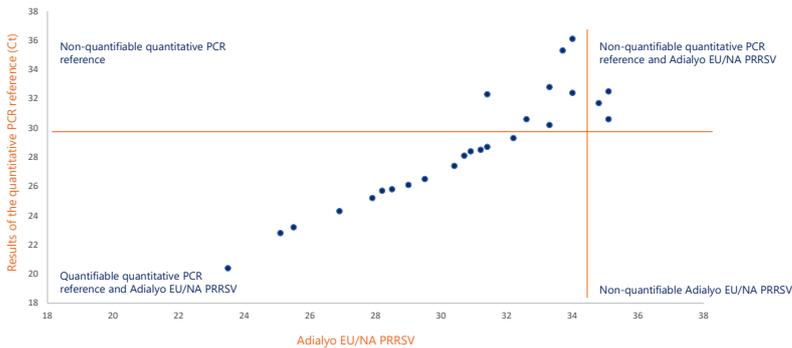
Limits of Detection and Quantification of PCR :

- LoD_{PCR} 10 copies/PCR (EU and NA)
- LQ_{PCR} 400 copies/PCR (EU) and 200 copies/PCR (NA)

Samples :

Sample	Individual analysis	Pool analysis
Whole blood / Serum	✓	5
Tissue (lung...)	✓	3
Saliva / Rope	✓	✓
Wash / Tracheobronchial swab	✓	✗
Semen	✓	✗

Correlation between the results of P. Renson's (*) publication and the ADIALYO™ EU/NA PRRSV kit on qualified serum samples



(*) P Renson, C. Deblanc, J. Bougon, M. Le Dimna, S. Gorin, S. Mahé, N. Barbier, F. Paboeuf, G. Simon, O. Bourry (2021). Concomitant Swine Influenza A Virus Infection Alters PRRSV MLV Viremia in Piglets but Does Not Interfere with Vaccine Protection in Experimental Conditions. Vaccines. 9:356.

Summary of the results: LoD_{method} and LoQ_{method} with the ADIAMAG™ kit

	Serum			Organ			Semen
	LoD	LoQ	Quantification domain	LoD	LoQ	Quantification domain	LD
EU PRRSV	4,62.10 ⁴ copies/mL	4,62.10 ⁵ copies/mL	4,62.10 ⁵ to 4,62.10 ⁸ copies/mL	5,78.10 ² copies/mg	1,39.10 ⁴ copies/mg	1,39.10 ³ to 1,39.10 ⁷ copies/mg	10 ⁵ copies/mL
NA PRRSV	2,66.10 ⁴ copies/mL	2,66.10 ⁵ copies/mL	2,66.10 ⁴ to 2,66.10 ⁸ copies/mL	1,33.10 ³ copies/mg	1,33.10 ⁴ copies/mg	1,33.10 ³ to 1,33.10 ⁷ copies/mg	2,5.10 ⁴ copies/mL

- Convergent results between the quantification methods tested

TO ORDER :

Code	Designation	Nb. of reactions
ADL13Y1-100	ADIALYO™ EU/NA PRRSV	100 R
NADI003	ADIAMAG™ - (RNA/DNA Extraction with magnetic beads)	200 R
NADI003-XL		800 R

Performance :



Inclusivity

(more than 20 strains/ target tested)

integrating the main attenuated vaccines in the market and the hyper virulent Chinese strain



Exclusivity

(more than 40 strains tested)



Quantification

of the genome using the CTL + calibrated



Smart solutions for sharp decisions



Contact us:

✉ f.bernard@biox.com

☎ +32 (0) 84 32 23 77

🌐 www.biox.com