

# Adia<sup>X</sup> - BVDV Triplex Lyo

ADL10Y1-BVDV\_PP01\_(EN)\_V02  
25/08/2023

New PCR Methods validated for BVD virus detection



## **i** CONTEXT OF BOVINE VIRUS DIARRHEA DIAGNOSTIC

**ADIALYO™ BVDV Triplex** enables Bovine Viral Diarrhea Virus (BVDV) and Border Disease Virus (BDV) detection on whole blood, serum, tissue and milk samples from cattle, sheep, goats, and wild deer using real-time enzymatic amplification.

Screening for IPI (Immunotolerant Permanently Infected) calves from ear notch samples is also now a well established procedure in RT-PCR.



### The new Animal Health Law (AHL) UE 2016/429

Commission Delegated Regulation (EU) 2020/689 of 17 December 2019 establishes minimum preventive measures for the control and early detection diseases, Bovine Viral Diarrhea is classified as a **category C** disease for cattle (diseases to be detected in order to avoid spreading); (RE 2020/2002 annexe III, section 6 for BVD diagnostic); (the FLI registration covers only cattle and not small ruminants).

## VALIDATION FOR BIO-X DIAGNOSTICS BVDV LYO METHODS

Reliable and validated methods on *serum samples*:

	Milk	Serum	Pool of Serum
LOD methods	NED ref sample => 100% detected NED diluted 1/20 => 100% detected		

- Sensitivity 100 %
- Specificity 100 %
- LOD<sub>methods</sub> with ADIAMAG: 160 DICT50/mL on serum and 1600 DICT50/mL on milk

Triplex PCR for better interpretation on pools

Reliable and validated methods on *ear notches samples*:

	ADIAPURE™ CLASSIC LYSIS	ADIAPURE™ FAST LYSIS	ADIAMAG™
LOD methods	NED ref sample => 100% detected NED diluted 1/25 => 100% detected		

- Sensitivity 100 %
- Specificity 100 %
- LOD<sub>methods</sub> : 16 DICT50/mL with ADIAPURE™ and 8 DICT50/mL with ADIAMAG™

## PERFORMANCE



The new Bio-X Diagnostics protocols deliver quick and reliable BVDV PCR results in compliance with AHL and the new standard of calves' ear notches matrix.

## NEW BVDV HEATLYSE SYSTEM FOR A DIRECT LYSIS PROTOCOL ON EAR NOTCHES:

- Integrated unit for BVDV direct lysis protocol.
- Compatible with AllFlex and Caisley BVD ear notches.



BVD virus fast detection on calves' ear notches with the HeatLyse system

## NEW VALIDATION WITH ADIAPURE™ TLB AND ADIAMAG™ ON EAR NOTCHES FOR 3 PROTOCOLS:

	CLASSIC LYSIS protocol	FAST LYSIS protocol	ADIAMAG™
<b>Preparation</b>	1 ear notch+ 280 µl buffer L1 + 20 µl buffer L2		1 ear notch + 350 µl LB3
<b>Incubation (Extraction)</b>	1 <sup>st</sup> : 20 min. +65°C	1 <sup>st</sup> : 8 min. +65°C	36 min automat included
	2 <sup>nd</sup> : 15 min. +95°C	2 <sup>nd</sup> : 8 min. +95°C	
<b>Amplification</b>	5 µl RNA extract and 1 hour only with ADIALYO™ BVDV Triplex		

- Quick: Incubation time reduced by 50%
- Easy transfer: same incubation for the 2 periods in FAST Lysis protocol

### Fast detection of the BVD virus from ear notches of IPI calves:

- Flash Lysis: RNA extraction in 16 minutes
- Easy tubes transfer from 65°C to 95°C
- Easy storage of 4 sets of 96 tubes
- Insulated handle and reusable Material

Easy to use for analysis flows in a context of unknown prevalence

### TO PLACE AN ORDER:

Code	Description	Nb. of reactions
ADL10Y1-100	ADIALYO™ BVDV Triplex	100 R
ADL10Y1-500	ADIALYO™ BVDV Triplex	500 R
ADIADP10E1-100 & -400	ADIAPURE™ TLB	100 R & 400 R
NADI003	ADIAMAG™ (magnetic beads extraction kit)	200 R
NIDC22PL-20	Easy Prep BVD	20
NQBD2-EU	GRANT dry heating unit	/
N96Bloc05ML	Removable AllFlex BVD heat block	/
N96TPACK	AllFlex BVD 4x96 grippable sockets	/



Smart solutions for sharp decisions

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