O.K. SERVIS BioPro s.r.o.

RABIES ELISA Ab KIT

is blocking ELISA diagnostic kit for detection of Rabies virus antibody in serum or plasma of domesticated and wild carnivores

CHARACTERISTICS

- test with 100% specificity - on panel of negative fox samples
- test with 95,5% sensitivity - compared with FAVN on panel of experimental fox and dog sera
- robust – routinely used in the laboratory for several years
- species independent – for foxes; dogs and raccoon dogs are under study
- suitable for rather diluted samples due to high analytical sensitivity
- suitable both for manual or robotic performance
- easy to use

BioPro Rabies ELISA Ab kit

ELISA DISAGNOSTIC KIT FOR DETECTION OF RABIES ANTIBODIES

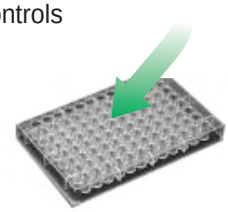
According to the WHO guidelines the efficiency of rabies oral vaccination campaigns should be controlled by detection of specific virus-neutralizing antibody. Unfortunately, golden standard tests like FAVN and RFFIT, broadly used in pet schemes, are not very suitable for wildlife samples which might be often toxic or autolyzed.

Inspired by above situation we have developed and validated blocking ELISA test for detection of rabies glycoprotein G antibodies in fox sera and body fluids

The BioPro RABIES ELISA Ab kit is unique by its superior analytical sensitivity and specificity which is very important for analysis of wildlife samples that are often autolysed, bacterially contaminated or diluted (body fluids).

STEP BY STEP PROTOCOL:

1 100µl Dilute samples & controls

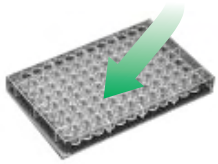


overnight (18-24 h)

2-8°C

- Dilute samples & controls
- Pipette 100µl to microplate
- Incubate overnight (18-24 hours) at 2-8°C

2 100µl Biotinylated anti-Rabies antibody

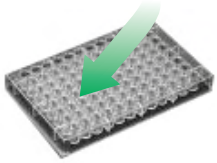


30 min

37°C

- Wash 6 times
- Add 100µl of Biotinylated anti-Rabies antibody
- Incubate 30 min at 37°C

3 100µl Streptavidin peroxidase conjugate

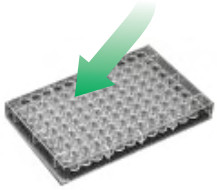


30 min

37°C

- Wash 4 times
- Add 100µl of Streptavidin peroxidase conjugate
- Incubate 30 min at 37°C

4 100µl TMB substrate

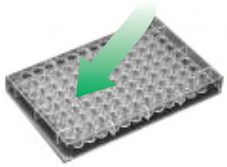


15 - 20 min

room tempera-ture away from direct light

- Wash 4 times
- Add 100µl of TMB substrate
- Incubate 15-20 min at room temperature

5 50µl Stop solution

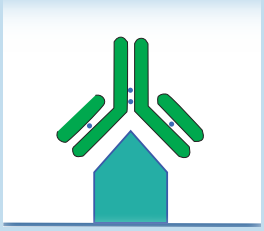


Reading 450 nm

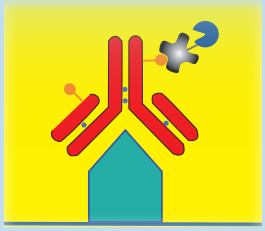
- Add 50µl of Stop solution
- Read the plate at 450 nm
- Calculate the percentage of blocking (PB)
- <u>Interpret results:</u>

PB <40%	negative result
40% ≤ PB<70%	positive for Rabies antibody (***Ab+***)
PB ≥ 70%	antibody level equal or higher than 0,5 IU/ml based on FAVN test (***Ab ≥ 0,5IU/ml***)

Positive → no colour reaction:



Negative → colour reaction:



Presence of specific antibody in sample blocks development of colour reaction.

Sample antibody

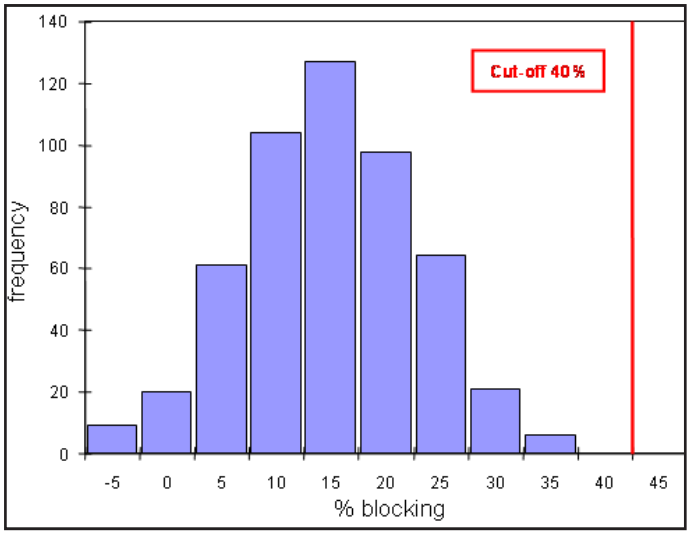
Biotinylated antibody

Antigen

Streptavidin-peroxidase conjugate

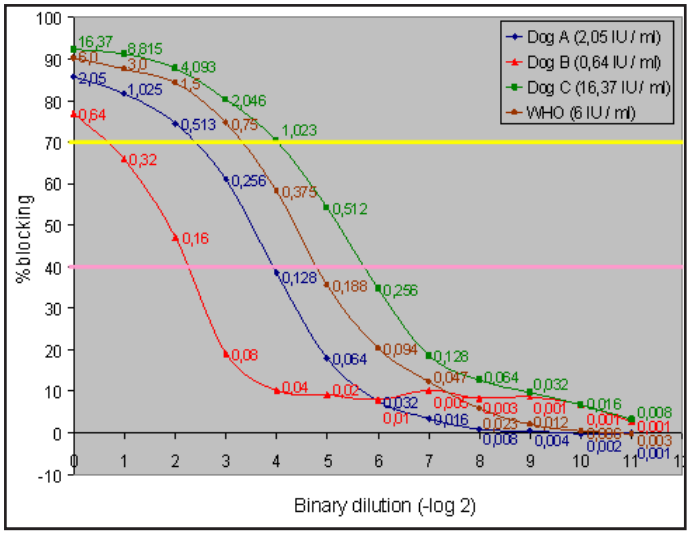
SPECIFICITY:

BioPro Rabies ELISA kit demonstrated 100% specificity on panel of 512 negative fox sera or body fluids.



ANALYTICAL SENSITIVITY:

BioPro Rabies ELISA kit proven excellent analytical sensitivity, irrespectively on initial titer, which is very important for testing of field wildlife samples often diluted.



EASY TO INTERPRET:

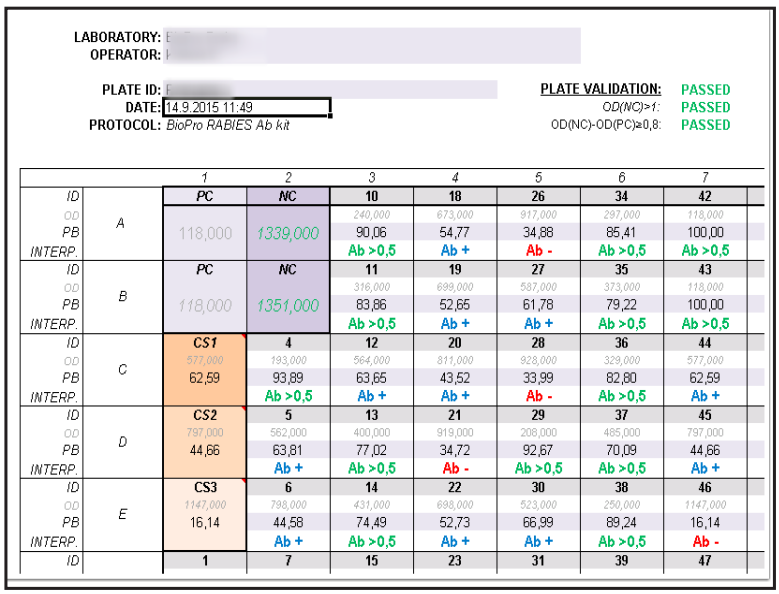
BioPro Rabies ELISA Ab kit is EASY to perform and also EASY to interpret.

We have prepared an advanced MS Excell evaluation template which gives you following comfort:

- Simple copy & paste data entry
- Checks the validity criteria of the results
- Checks the values of internal controls as performance quality indicator
- Calculates the percentage of blocking (PB) for each sample and interprets the results

Further the user can:

- Enter laboratory, operator and plate indentification
- Comment the results
- Print reports both in plate and table view



PUBLICATIONS:

Interesting articles, presentations and posters were published about the BioPro Rabies ELISA Ab kit. Here follow references to the most important ones:

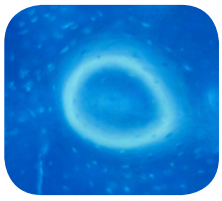
Evaluation of ELISA for detection of rabies antibodies in domestic carnivores
- *Journal of Virological Methods, Volume 179, Issue 1, January 2012, Pages 166-175*
- Marine Wasniewski, Florence Cliquet

Evaluation of an ELISA to detect rabies antibodies in orally vaccinated foxes and raccoon dogs sampled in the field
- *Journal of Virological Methods, Volume 187, Issue 2, February 2013, Pages 264-270*
- M. Wasniewski, A.L. Guiot, J.L. Schereffer, L. Tribout, K. Mähar, F. Cliquet

Use of filter paper blood samples for rabies antibody detection in foxes and raccoon dogs
- *Journal of Virological Methods, Volume 204, August 2014, Pages 11-16*
- Marine Wasniewski, Jacques Barrat, Benoit Combes, Anne Laure Guiot, Florence Cliquet

RELATED PRODUCTS:

OSTEOTOM



Designed for efficiency control of oral rabies vacaination

- parallel cutting of two samples to increase capacity
- water cooling of the saws
- collection of the specimen in water jar
- precise rotation speed regulation
- disc thrust regulation by sliding weight (separate for each sample)
- specimen slice thickness from 0,3 mm
- designed in stainless steel for easy cleaning
- „splashers“ against cooling water splashing

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