

Blue Tongue Virus (BTV)

Ingezim BTV MILK 12.BTV.K.1

INTRODUCTION

Ingezim BTV-MILK is an enzymatic assay based in the indirect ELISA technique, which uses monoclonal antibody (Mab) specific for IgG of cattle, sheep and goats; and recombinant antigen.

TECHNICAL BASIS OF THE KIT

1. Plates are supplied coated with BTV antigen (recombinant VP7 protein). Milk samples are added and incubated.
2. If the samples contain antibodies specific of BTV, they will bind the antigen.
3. Once conjugate is added, it will bind to the protein only if there are antibodies of the sample bound to the antigen (positive animals). In case that there are not antibodies bound to the antigen (negative animals), conjugate will not be able to bind it. Binding is detected by a colorimetric reaction after the addition of the substrate.

APPLICATIONS

1. Detection of antibodies specific for BTV VP7 protein in milk samples.
2. Use of tank and individual milk samples

INTERPRETATION OF THE RESULTS

A cut off is used for results interpretation: positive and negative.

The samples will be considered **Positive** (they contain antibodies to BTV), if the OD value at 450nm higher than the cut off.

The samples will be considered **Negative** (they do not contain antibodies to BTV), if the OD value at 450 nm is equal or lower than the negative cut off.

The samples which OD value is between the cut off value $\pm 10\%$ will be considered **Doubtful**.

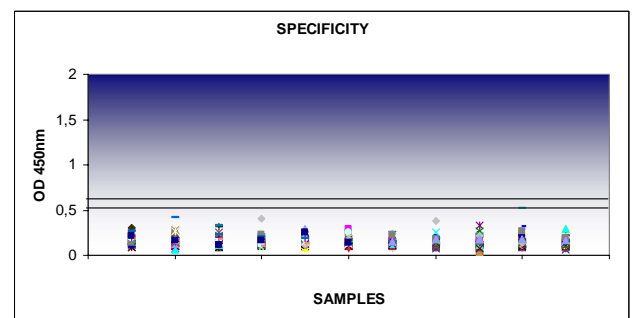
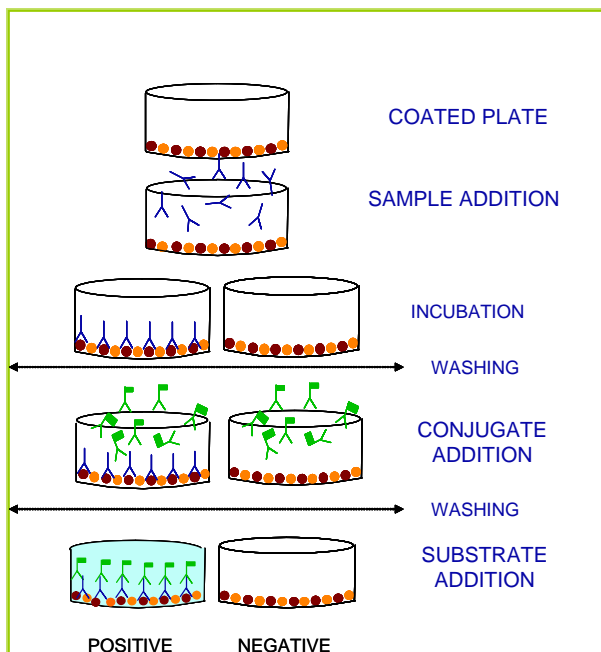
SENSITIVITY AND SPECIFICITY

1. Specificity in field trials

1043 milk samples have been analyzed from herds free of BTV.

- 1030 negative milks from Spain.
- 13 negative milks from Germany.

Results indicate just one sample as suspicious, hence the **specificity in this study is near 100%**.



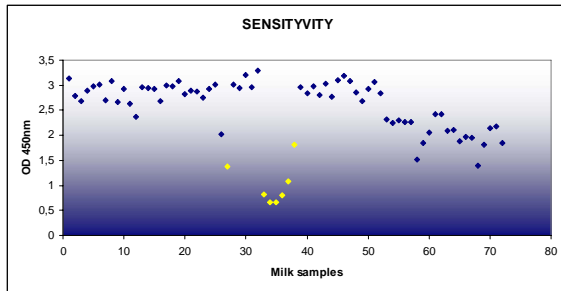


2. Sensitivity in field trials

72 previously characterized positive samples were analyzed.

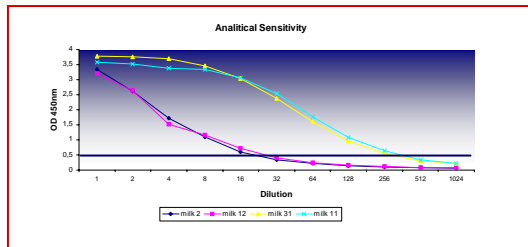
- 19 individual positive milks from Germany.
- 46 individual positive milks from Spain.
- 7 positive tank milks from Spain (♦)

All samples assayed were called positive by INGEZIM BTV-MILK. Hence, in this study, the assay showed 100% sensitivity.



3. Analytical sensitivity.

In order to determine the analytical sensitivity 14 positive samples representing different grades of positivity have been serially diluted in negative milk. Results obtained indicate that the assay is able to detect positive samples in tanks of 20-200 depending on the positivity of this sample (Figure represents four examples).



KIT COMPOSITION

The Kit contains plates coated with BTV antigen (recombinant VP7 protein). There are several formats.

COMPONENT DESCRIPTION

Microtitration plates of 96 wells divided into 12 strips of 8 wells each.

Vial with Positive Control.

Vial with Negative Control.

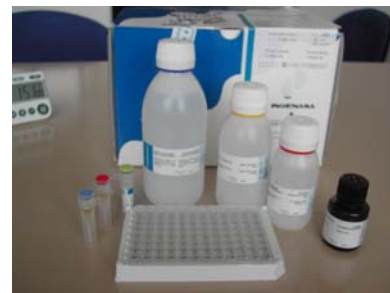
Vial with Conjugate

Bottles with Washing Solution concentrated.

Bottles with diluent

Bottle with substrate (TMB) ready to use.

Bottle with stop solution.



Shelf-life

12 months at 4° C

PRODUCT MANUFACTURED BY INGENASA



ISO 9001:2000 ISO 14001:2004
Certificación nº: 45303 Certificación nº/EMS 512003

FT: I-12.BTV.K1

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