



Revised 24 Aug. 2009 (Vers. 3.0)

For Veterinary Use Only

Please use only the valid version of the package insert provided with the kit.

INTRODUCTION

FeLV-p27 antigen is the major core protein of FeLV. This antigen is found in the blood of FeLV-infected cats. These cats are infectious for others through horizontal transmission. This test is an alternative for the widely used IFA test on blood smears, which is successfully used in control programs.

The detection levels are comparable with IFA, but the ELISA tends to detect FeLV-p27 in some cases at an earlier stage. IFA or virus-isolation must be used to confirm positive ELISA results!

INTENDED USE

The FeLV-p27 ELISA test kit is designed to detect p27 antigen in individual serum/plasma samples. For this purpose monoclonal anti-FeLV antibodies attached to the plate will catch the viral antigen in the sample to be tested. After incubation, the bound antigen is detected by use of a polyclonal anti-FeLV conjugate. After incubation and washing the substrate is added. The color development is directly correlated with the quantity of the bound p27 in the serum sample.

PRINCIPLE OF THE TEST

The test is based on the reaction of FeLV-p27 antigen with monoclonal anti-FeLV-p27 antibodies. To this end these monoclonal antibodies are coated to a 96 well microtiter strip plate.

The cat serum sample is added (diluted 1:1) to the wells of the coated plate.

After incubation, the bound p27 antigen is detected by a polyclonal anti-FeLV-p27 conjugate.

Bound conjugate is made visible by adding substrate/chromogen mix.

Intensity of the color reaction in the wells is directly correlated to the concentration of p27 antigen in the serum sample.

CONTENTS

- 12 x 8 microtiter strips
- 1 x strip holder
- 1 x 18 ml ELISA buffer
- 1 x 12 ml **HRPO conjugated anti-FeLVp27 antibodies**
- 1 x 1 ml **positive control** serum (freeze-dried)
- 1 x 1 ml negative control serum (freeze-dried)
- 1 x 20 ml wash solution 200 x concentrated, dilute in deionized water before use!
- 1 x 7 ml substrate buffer A
- 1 x 7 ml substrate buffer B
- 1 x 8 ml stop solution
- 1 x plastic cover seal

HANDLING AND STORAGE OF SPECIMENS.

The ELISA should be stored at 4-8°C. An unopened package can be used until the expiry date.

An open package can be used if the requirements, mentioned in the validation (see chapter 9) are fulfilled. If not fulfilled the test can no longer be used.

Avoid repeated freezing and thawing as this increases non-specific reactivity.





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Samples may be used fresh or may be kept frozen below -20°C before use. Positive and negative controls may be stored after reconstitution in aliquots at -20°C and used until the expiry date.

WASH PROTOCOL

In ELISA's, un-complexed components must be removed efficiently between each incubation step. This is accomplished by appropriate washing. It should be stressed that each washing step must be carried out with care to guarantee reproducible inter- and intra-assay results. It is essential to follow the washing procedures outlined below. Washing may be done manually or with automatic equipment. Automatic washing equipment usually gives better results.

Manual washing

- 1. The wash solution is 200X concentrated, dilute in deionized water before use!
- 2. Empty each well by turning the microtitre plate upside down, followed by a firm vertical downward movement to remove the buffer.
- 3. Fill all the wells with 250 µl of diluted washing solution.
- 4. This washing cycle (2 and 3) should be carried out at least 4 times.
- 5. Turn the plate upside down and empty the wells by a firm short vertical movement.
- 6. Place the inverted plate on absorbent paper towels and tap the plate firmly to remove residual washing solution in the wells.
- 7. Take care that none of the wells dries out before the next reagent is dispensed.

Washing with automatic equipment

The wash solution is 200X concentrated, **dilute in deionized water before use!** When using automatic plate washing equipment, check that all wells can be aspirated completely and that the washing solution is correctly dispensed, reaching the rim of each well during each rinsing cycle. The washer should be programmed to execute **at least 4 washing cycles**.

PRECAUTIONS

- Handle all biological material as though capable of transmitting FeLV.
- Do not pipette by mouth.
- Do not eat, drink, smoke or prepare foods, or apply cosmetics within the designated work area.
- TMB is toxic by inhalation, through contact with skin or when swallowed; observe care when handling the substrate.
- Do not use components past the expiry date and do not mix components from different serial lots together.
- Optimal results will be obtained by strict adherence to this protocol. Careful pipetting and washing throughout this procedure are necessary to maintain precision and accuracy.
- Each well is ultimately used as an optical cuvette. Therefore, do not touch the under-surface of the microtiter plate and protect is from damage and dirt.





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TESTPROTOCOL

- 1. Reconstitute directly before use the positive control in 1 mL and the negative control in 1 mL deionized water.
- Open the packet of strips and take out the strips to be used. Store the remaining strips at +4-8°C. Wash the microtiter strip(s) with washing solution, according to washing protocol. The provided washing solution must be diluted 200x in de-ionised water!
- Add 50 μl of ELISA buffer to all wells to be used.
 To one well of the coated strip add 50 μl of positive control and to another well 50 μl of negative control.
 In addition, add 50 μl of each sample to an individual marked well of the strip.
- 4. Seal and incubate for 60 min. at 37°C.
- 5. Wash as in 2.
- 6. Dispense 100 µl HRPO labeled anti-species conjugate to all wells.
- 7. Seal and incubate 60 minutes at 37°C.
- 8. Wash as in 2.
- 9. Mix equal parts of buffer A an B with gentle shaking. Prepare immediately before use!
- 10. Dispense 100 μl substrate solution to each well. Incubate 15 minutes at room temperature (21°C.).
- 11. Add 50 µl stop solution to each well; mix well.
- 12. Read the absorbency values immediately (within 10 minutes!) at 450 nm.

Validation of the test

To standardize the FeLV-p27 ELISA a positive and negative control have to be tested. The FeLV postive control should give an OD (450nm) \geq 1.000. The OD (450nm) of the negative control must be lower than 0.400.

INTERPRETATION OF TEST RESULTS

A sample is considered positive when the measured extinction is higher than 3 times the OD of the negative control. When a sample is **negative** > **sample** < $3 \times negative$, it should be tested again within 2-4 weeks.

The OD of the positive control must be higher than 1.000.

IMPORTANT: A positive ELISA-result must be confirmed by IFA or by virus isolation.

The entire risk as to the performance of these products is assumed by the purchaser. DRG shall not be liable for indirect, special or consequential damages of any kind resulting from use of the products.





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Symbols used with DRG Assays

| Symbol | English | Deutsch | Français | Español | Italiano |
|----------------|--|-----------------------------------|--|--|---------------------------------------|
| L | Consult instructions for use | Gebrauchsanweisung beachten | Consulter les instructions d'utilisation | Consulte las instrucciones de uso | Consultare le istruzioni per l'uso |
| ((| European Conformity | CE-Konfirmitäts- kennzeichnung | Conformité aux normes européennes | Conformidad europea | Conformità europea |
| IVD | In vitro diagnostic device | In-vitro-Diagnostikum | Usage Diagnostic in vitro | Para uso Diagnóstico in vitro | Per uso Diagnostica in vitro |
| RUO | For research use only | Nur für Forschungszwecke | Seulement dans le cadre de recherches | Sólo para uso en investigación | Solo a scopo di ricerca |
| VET | For veterinary use only | | | | |
| REF | Catalogue number | Katalog-Nr. | Numéro de catalogue | Número de catálogo | Numero di Catalogo |
| LOT | Lot. No. / Batch code | Chargen-Nr. | Numéro de lot | Número de lote | Numero di lotto |
| T | Contains sufficient for <n> tests/</n> | Ausreichend für "n" Ansätze | Contenu suffisant pour "n" tests | Contenido suficiente para <n> ensayos</n> | Contenuto sufficiente per "n" saggi |
| | Storage Temperature | Lagerungstemperatur | Température de conservation | Temperatura de conservación | Temperatura di conservazione |
| | Expiration Date | Mindesthaltbarkeits-datum | Date limite d'utilisation | Fecha de caducidad | Data di scadenza |
| | Legal Manufacturer | Hersteller | Fabricant | Fabricante | Fabbricante |
| Distributed by | Distributor | Vertreiber | Distributeur | Distribuidor | Distributore |
| Content | Content | Inhalt | Conditionnement | Contenido | Contenuto |
| Volume/No. | Volume / No. | Volumen/Anzahl | Volume/Quantité | Volumen/Número | Volume/Quantità |

| Symbol | Portugues | Dansk | Svenska | Ελληνικά |
|----------------|---|--|--|--|
| []i | Consulte as instruções de utilização | Se brugsanvisning | Se bruksanvisningen | Εγχειρίδιο χρήστη |
| CE | Conformidade com as normas europeias | Europaeisk overensstemmelse | Europeisk överensstämmelse | Ευρωπαϊκή Συμμόρφωση |
| IVD | Diagnóstico in vitro | In vitro diagnostik | Diagnostik in vitro | in vitro διαγνωστικό |
| RUO | | | | |
| VET | | | | |
| REF | Catálogo n.º | Katalognummer | Katalog nummer | Αριθμός καταλόγου |
| LOT | No do lote | Lot nummer | Batch-nummer | Αριθμός Παρτίδος |
| \sum | | Indeholder tilsttrækkeligt til "n" test | Innehåller tillräckligt till "n" tester | Περιεχόμενο επαρκές για «n» εξετάσεις |
| 1 | Temperatura de conservação | Opbevarings-temperatur | Förvaringstempratur | Θερμοκρασία αποθήκευσης |
| Σ | Prazo de validade | Udløbsdato | Bäst före datum | Ημερομηνία λήξης |
| A44 | Fabricante | Producent | Tillverkare | Κατασκευαστής |
| Distributed by | | | | |
| Content | Conteúdo | Indhold | Innehåll | Περιεχόμενο |
| Volume/No. | Volume/Número | Volumen/antal | Volym/antal | Όγκος/αριθ |

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