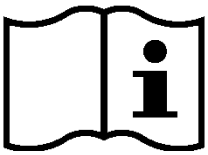
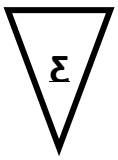


Useŕs Manual

Leishmania Antibody SRE

An SRE based on a partially purified antigen to detect antibodies against Leishmania in serum samples or plasma samples

REF D3214-AB01



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Nov 2021

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

1. Table of Contents

2. Introduction

Leishmania causes visceral and cutaneious disease. Sand-flies of the genus Phlebotomus and Lutzomyia are the primary vectors. Symptoms of immune complex disease are prominent; Exfoliative dermatitis with alopecia, ulceration's, onychogryphosis, sterile pustule and nodule formation, paronychia, muzzle and footpad hyperkeratosis and depigmentation, focal pinnal, muzzle and periocular scaling and alopecia, erythematous plaques, diffuse erythema and a dull, brittle, poor-quality hair coat are potential dermatological patterns. Localized or generalized lymphadenopathy is seen. The most common signs associated with visceral involvement are weight loss and decreased activity. Renal failure is the major cause of death.

3. Intended use of the test kit

The Leishmania SRE test kit is designed to detect antibodies against Leishmania proteins. Leishmania proteins are attached to the solid phase. After washing the strips are incubated with the samples to be tested. The strips are washed after incubation to remove unbound materials. A HRPO labelled anti-species conjugate is added to detect bound dog antibodies to Leishmania proteins. After incubation and rinsing the substrate is added and the optical density is measured at 620 nm.

4. Principle of the test kit

The test is based on the reaction of Leishmania proteins with dog antibodies. To this end Leishmania proteins have been coated to a 32-well microtiter plate.
The diluted dog serum/plasma sample is added to the wells of the coated plate.
After washing the bound dog antibodies are detected by a HRPO conjugated anti-species conjugate.
The colour reaction in the wells is directly related to the concentration of Leishmania antibodies in the serum/plasma sample.

5. Contents

- 4x 8 Microtiter strips coated with Leishmania proteins
- 2x ELISA buffer (white bottle + green cap)
- 1x HRPO conjugated antibodies (black bottle + red cap)
- 1x Positive control (freeze dried) (purple cap)
- 1x Negative control (freeze dried) (silver cap)
- 1x Substrate A (white bottle + white cap)
- 1x Substrate B (black bottle + blue cap)
- 1x User's manual

Supplies needed (not included)

- Precision pipette 10-200µl (EVL)
- Pipette tips and clean containers/tubes (EVL)
- ELISA plate reader (the results can be interpreted by eye, but for a more accurate and objective reading the use of the ELISA plate reader is strongly recommended)

6. Handling and storage of specimens

- The kit should be stored at 4°C.
- An open strip packet should be used within 28 days.
- 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.
- Avoid repeated freezing and thawing as this increases non-specific reactivity.

7. Preparations

- Before using the reagents needed, take them out of the kit and place them on the table for ±15 min. at room temperature (±21°C) without exposing them to direct sunlight or (other) heat sources.
- Buffer, controls, standards and conjugates need to be shaken gently before use, in order to dissolve/mix any components that may have precipitated. Gently tap the vials onto the table, so any fluid still retained in the cap falls back into the solutions.
- If fluids need to be mixed into the test well, gently shake by tapping the wells with the fingers or re-suspend with the last pipette tip used for that particular well. Avoid contamination through spattering and prevent any fluid to enter inside the pipette itself.
- Place the reagents back at 4-8°C immediately after use.

8. Test protocol qualitative

1. Before starting this test read **"preparations**".
2. Open the packet of strips and take out the amount of wells needed from the test strip, 1 for each sample and 2 extra wells for the controls. Cover the remaining strips with a part of the provided seal and store them at 4°C and use them within 10 days.
3. Use the precision pipette 10-200µl and use a clean pipette tip **before** pipetting the buffer, standards, samples, conjugate and substrate.
4. Before testing make sure all reagents are at room temperature.

5. Wash the test strips with running tap water.
    - Fill all wells to the rim.
    - Empty the wells.
    - Repeat 5 times.
    - Turn the wells upside down and empty the wells by slapping the strips onto a tissue paper. Take care that none of the wells dry out before the next reagent is dispensed.

6. Add 200µl of buffer to the sample wells.
7. Add 200µl of buffer to the control wells.
8. Add 10µl of control serum (positive and negative) to each control well.
9. Add 1µl of sample (serum/plasma) to the remaining wells.
10. Mix the reagents (see **"preparations**").
11. Incubate for 40 minutes at room temperature (±21 °C).

12. Wash the test strips with running tap water.
    - Fill all wells to the rim.
    - Empty the wells.
    - Repeat 5 times.
    - Turn the wells upside down and empty the wells by slapping the strips onto a tissue paper. Take care that none of the wells dry out before the next reagent is dispensed.

13. Add 100µl of conjugate to each well.
14. Incubate for 40 minutes at room temperature (±21 °C).
15. Turn on the analyser (when available).

16. Wash the test strips with running tap water.
    - Fill all wells to the rim.
    - Empty the wells.
    - Repeat 5 times.
    - Turn the wells upside down and empty the wells by slapping the strips onto a tissue paper. Take care that none of the wells dry out before the next reagent is dispensed.

17. Add 60µl of substrate A to each well.
18. Add 60µl of substrate B to each well.
19. Mix the reagents gently (see **"preparations"**).
20. Incubate for 15 minutes in the dark (e.g. cover the wells with a sheet of paper).

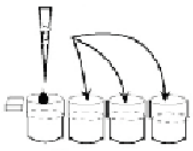
21. Read the absorbency values immediately (**within 10 min!**) at 620 nm on the analyser or by eye.
    Note: in case of using stop solution read the absorbency at 450 nm on the analyser.

9. Illustrated Test protocol

STEP: 5

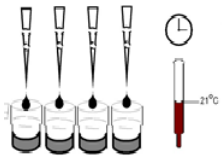
- Wash procedure
- Repeat 5 times

STEP: 6 & 7



- Add 200µl of buffer to the sample wells.
- Add 200µl of buffer to the control wells.

STEP: 8 t/m 11

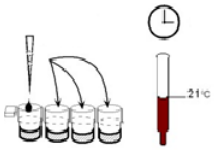


- Add 10µl of control serum (positive and negative) to each control well.
- Add 1µl of sample (serum/plasma) to the remaining wells.
- Mix the reagents gently (see “preparations”).
- Incubate for 40 minutes at ±21°C.

STEP: 12

- Wash procedure
- Repeat 5 times

STEP: 13 & 14

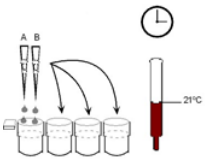


- Add 100µl of conjugate to each well.
- Incubate for 40 minutes at ±21°C.

STEP: 16

- Wash procedure
- Repeat 5 times

STEP: 17 t/m 21



- Add 60µl of substrate A to each well.
- Add 60µl of substrate B to each well.
- Mix the reagents gently (see “preparations”).
- Incubate for 15 minutes in the dark at ±21°C.

Read the absorbency values immediately (within 10 min!) at 620 nm on the analyser or by eye
Note: in case of using stop solution read the absorbency at 450 nm on the analyser.

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10. Precautions

- Handle all biological material as through capable of transmitting infectious diseases.
- Do not pipette by mouth.
- Do not eat, drink, smoke or prepare foods, or apply cosmetics within the designated working area.
- TMB substrate (buffer B) is toxic by inhalation, through contact with skin or when swallowed; observe care when handling substrate.
- Do not use components past the expiry date and do not mix components from different serial lots.
- 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 optimal cuvette. Therefore, do not touch the under-surface of the microtiter plate and protect it from damage and dirt.

11. Interpretation of the test results

The analyser will give the results as positive, weakly positive or negative, but always double-check the outcome by observing the intensity of colour development.

- **Positive**
  - A sample is scored positive if the sample colour is dark blue, at least as blue as the positive control.

- **Weakly positive:**
  - A sample is scored weakly positive if the sample colour is blue, with an intensity between that of the negative and positive control.

- **Negative:**
  - A sample is scored negative if the sample colour is equally blue or less blue than the negative control.

Note:
Diseased animal that is positive in this test (and is showing signs suggestive of Leishmania) is considered positive and must be suspected of shedding Leishmania.

12. Symbols used with EVL ASSAYS

Symbol	Definition
	Consult instructions for use
	European Conformity
	In vitro diagnostic device
	For research use only
	Catalogue number
	Lot/ No. / Batch code
	Contains sufficient for <n> tests
	Storage Temperature
	Expiration Date
	Legal Manufacturer
Distributed by	Distributor
Content	Content
Volume/No.	Volume / No.

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