Porcine Taenia Solium IgG ELISA Kit (JN589018)

MATERIALS PROVIDED & STORAGE CONDITIONS

Item	Specifications
ELISA Microtiter plate	96 wells
Dilution plate	96 wells
HRP Conjugate	10 mL
Sample Diluent	6 mL
20×Concentrated Wash Buffer	25 mL
Substrate Reagent A	6 mL
Substrate Reagent B	6 mL
Stop Solution	6 mL
Positive Control	0.5 mL
Negative Control	0.5mL
Plate Sealer	3 pieces
Sealed Bag	1 piece
Manual	1 copy

* Provided this is within the expiration date of the kit.

Test principle

This kit uses an indirect enzyme-linked immunosorbent assay (ELISA). Microtiter wells are pre-coated with Taenia solium IgG antigen. During the assay, samples and HRP-labelled detection antibody are added sequentially to the wells. After incubation and thorough washing, the substrate TMB is added. TMB is converted to a blue colour under the catalysis of peroxidase, and turns yellow after addition of the stop solution. The optical density (OD) is measured at 450 nm using a microplate reader. The result is determined by comparing the sample OD value with the cut-off value to judge the presence or absence of Taenia solium IgG antibody (TS-IgG-Ab) in the sample.

Other materials required but not supplied

Microplate Reader with 450 nm wavelength filter or dual-wavelength (450/630 nm)

High-precision transferpettor, EP tubes and disposable pipette tips

37℃ incubator or water bath

Deionized or distilled water

Absorbent paper

Notes

1. Wear gloves and work clothes during experiment, and the disinfection and isolation system should be strictly performed. All the waste should be handled as contaminant.
2. The stop solution is corrosive, it should be avoided to contact with skin and clothing. Wash immediately with plenty of water if contacted carelessly.
3. FOR RESEARCH USE ONLY. ELISA Microtiter plate should be covered by plate sealer. Avoid the kit to stro ng light.
4. Concentrated wash buffer at low temperature condition is easy to crystallize, it should be adjusted to room temperature in order to dissolve completely before use.
5. Each well must be filled with liquid when washing in order to prevent residual free enzyme.
6. The tested sample should keep fresh.
7. The results shall depend on the readings of the microplate reader.
8. **Each reagent is optimized for use in the JN589018. Do not substitute reagents from any other manufacturer into the test kit. Do not combine reagents from other JN589018 with different lot numbers.**
9. If the samples are not indicated in the manual, a preliminary experiment to determine the validity of the kit is necessary.

Storage and expiry date

Store at 2-8℃. Avoid freeze.

Please store the opened plate at 2-8℃, the shelf life of the opened kit is up to 1 month.

Expiry date: expiration date is on the packing box.

Sample preparation

1. **Serum:** Use tubes that are free of pyrogens and endotoxins. Avoid any cell stimulation during the procedure. After blood collection, centrifuge at 3000 rpm for 10 minutes to separate serum from red blood cells promptly and carefully.

2. **Plasma:** Collect using EDTA, citrate, or heparin as anticoagulant. Centrifuge at 3000 rpm for 30 minutes and take the supernatant.

3. **Cell culture supernatant:** Centrifuge at 3000 rpm for 10 minutes to remove particles and polymers.

4. **Tissue homogenates:** Add an appropriate amount of normal saline to the tissue and homogenise. Centrifuge at 3000 rpm for 10 minutes and take the supernatant.

5. **Storage:** If samples are not tested immediately after collection, aliquot them into single-use portions and store at -20 °C. Avoid repeated freeze-thaw cycles. Thaw at room temperature and ensure the sample is uniformly and completely thawed before use.

Assay procedure

Restore all reagents and samples to room temperature (25℃) before use. All the reagents should be mixed thoroughly by gently swirling before pipetting. Avoid foaming. The unused ELISA Microtiter plate should be sealed as soon as possible and stored at 2-8℃.

1. Remove the required number of strips from the foil pouch after equilibration to room temperature for 20 minutes. Return unused strips to the resealable pouch and store at 4 °C.
2. Set negative control wells, positive control wells, and sample wells. Add 50 µL of negative control and positive control to their respective wells.
3. For test sample wells, first add 10 µL of the test sample, then add 40 µL of sample diluent.
4. Then add 100 µL of HRP labelled detection antibody to each well (including control and sample wells). Cover the plate with the sealing film and incubate at 37 °C for 60 minutes in a water bath or incubator.
5. Discard the liquid, tap dry on absorbent paper. Fill each well with wash buffer, let stand for 1 minute, discard the wash buffer, and tap dry on absorbent paper. Repeat the wash 5 times (an automatic plate washer may also be used).
6. Add 50 µL of Substrate A and 50 µL of Substrate B to each well. Incubate at 37 °C in the dark for 15 minutes.
7. Add 50 µL of Stop Solution to each well. Measure the OD of each well at 450 nm within 15 minutes.

Interpretation of the results

1. Assay validity: The average OD value of the positive control wells should be ≥ 1.00, and the average OD value of the negative control wells should be ≤ 0.15.
2. Cut-off calculation: Cut-off value = Average OD of negative control wells + 0.15.
3. Negative interpretation: If the sample OD value is ≤ the cut-off value, the sample is considered negative.
4. Positive interpretation: If the sample OD value is ≥ the cut-off value, the sample is considered positive.

Limitations of this test method

1. This kit is for research use only. It must not be used in clinical or human experiments. Any consequences arising from such use are the sole responsibility of the user, and the company assumes no liability.

2. The kit must be used strictly in accordance with this instruction manual. Any deviation from the instructions is at the user's own risk.