

# MYCOPLASMA SYNOVIAE (MS)ANTIBODY ELISA KIT MANUAL

ELISAKITS.ONLINE

By Immunomart



# Mycoplasma Synoviae(MS) Antibody ELISA Test Kit

Catalogue Number. IP100194

# **Product Usage**

This kit is used to detect Mycoplasma Synoviae(MS) antibody in chicken serum, to assess antibody condition by Mycoplasma Synoviae(MS) vaccine in chicken farm and assist diagnosis of serological infected chicken.

# Principle

The Mycoplasma Synoviae(MS) antibody ELISA kit is based on an indirect enzymatic immunoassay (Indirect ELISA). The antigen is coated on plates. When a sample serum contains specific antibodies against virus, they will bind to the antigen on plates. Wash the unbound antibodies and other components. Then add a specific enzyme conjugate. After incubation and washing, add the TMB substrate. A colorimetric reaction will appear, measured by a spectrophotometer (450 nm).

Specifications: 96 wells × 2.

# **Components**

	Code item	Spec.
1	MS antigen coated microplate	1 plate of 96 wells
2	Enzyme conjugate	11 ml
3	10×concentrated washing buffer	100 ml
4	Substrate solution	11 ml
5	Sample dilution	100 ml
6	Stop solution	15 ml
7	Negative control	2 ml
8	Positive control	1.6 ml
9	Serum dilution plate	1 piece
10	Adhesive film	2 pieces
11	Instruction	1 piece

# Material required not provided

1. Micropipettes: 0.5μL~10μL、10μL~100μL、100μL~1000μL

2. Disposable pipette tips

3. Measuring cylinder: 500 ml

4. 96 wells microplate reader

5. Distilled water or deionized water

6. Bottle or microplate washing machine



# Sample preparation

Take animal whole blood, get serum by using regular method, the serum should bright and no hemolysis

# Washing buffer preparation

Return 10X Concentrated washing buffer into room temperature before use, if there is salt crystals, shake to make it dissolved, then dilute it at 10 times with distilled water or deionized water. The diluted washing buffer can store at 4°C for about 1 week.

### Sample dilution

At serum dilution plate, dilute serum at 1:100 with sample diluent.

Notice: Negative control and Positive control do not need dilute. Exchange tip after taking sample every time, record the situation of the sample on plate accurately. Shake the sample evenly before adding it

### **Operation procedures**

- 1) Take pre-coated microplate (Can unseal for several time use as per sample quantity), add  $100\mu$ L diluted serum to sample wells, meanwhile set 1 well for Negative control, 2 wells for Positive control separately. Add  $100\mu$ L Negative/Positive control to its wells. Shake softly, do not overflow, cover and incubate at  $37^{\circ}$ C for 30 min.
- 2) Pour the liquid out of the wells, add 250  $\mu$ L diluted washing buffer to each well, pour out. Repeat 4-6 times, at last pat to dry on absorbent paper.
- 3) Add 100µL Enzyme conjugate to each well, shake softly, cover and incubate at 37°C for 30 min.
- 4) Repeat the step 2(washing). Remember pat to dry on absorbent paper at last.
- 5) Add 100µL substrate to each well, mix properly, react for 10 min at dark at 37°C in dark.
- 6) Add 50µl of stop solution in each well, and measure the result within 10 min.

### Results

Read the OD value by microplate-reader at wavelength of 450nm (630nm as reference) . For the test to be valid:

OD value of Negative control (N) < 0.2;

meanwhile OD value of Positive control (P)>0.4.

### Notes

- 1) All reagents should be adjusted to the room temperature and shake evenly before using, store at 2-8 °C after using
- 2) Do not exchange the reagents from the kits of different lot numbers to use. Avoid reagent pollution when using.
- 3) Substrate and stop solution may be excitant to skin and eyes, pay attention when using.
- 4) Do not expose Substrate to light and avoid it contact with antioxidants.
- 5) The wells should avoid damp or touching water after unsealing (Put the un-using microplate back to bag with dehydrator in  $2^8$  °C soon )
- 6) Deal all waste reasonable before dumping to avoid pollution.
- 7) Strictly adhere to instruction to get best result. All procedure including pipetting, timing and washing etc. must be accurate.



8) Serum dilution plate is disposable, do not use for second time; the MAX volume of it is  $300\mu L/well$ .

**storage:** store at 2-8°C, dark, sealed, dry place, no frozen.. **Expiry date:** 12 months; date of production is on box.