

Anti-RSV-Pre-F0 specific Antibody Pair

Catalog Number: RAS-P166

Pack Size: 100 µg

IMPORTANT: Please carefully read this manual before performing your experiment.

For Research Use Only. Not For Use in Diagnostic or Therapeutic Procedure

INTENDED USE

This pair is developed for detection of RSV-Pre-F0 in samples. It is intended for research use only (RUO).

PRINCIPLE OF THE ASSAY

This assay Pair is used to measure the levels of Pre-Fusion glycoprotein F0 by employing a standard sandwich-ELISA format. Firstly, attach the RSV-Pre-F0 Capture Antibody (Monoclonal, Human IgG1 | Human Kappa) to the microplate, add your samples to the plate, incubate and wash the wells. Then add the HRP-RSV-Pre-F0 Detection Antibody (Monoclonal, Human IgG1 | Human Kappa) to the plate, incubate and wash the wells. At last, load the substrate into the wells and monitor solution color from blue to yellow. The reaction is stopped by the addition of a stop solution and the intensity of the absorbance can be measured at 450 nm and 630 nm. The OD Value reflects the amount of Pre-Fusion glycoprotein F0 bound.

MATERIALS PROVIDED

Table1. Materials provided

Catalog	Components	Size (100 µg)	Format	Storage	
				Unopened	Opened
RAP166-C01	RSV-Pre-F0 Capture Antibody	100 µg	Powder	-20°C ~ -70°C	-70°C
RAP166-C02	HRP-RSV-Pre-F0 Detection Antibody	100 µg	Powder	-20°C ~ -70°C	-70°C

SRORAGE

1. Unopened kit should be stored at -20°C to -70°C upon receiving.
2. Find the expiration date on the outside packaging and do not use reagents past their expiration date.
3. The opened product should be stored per Table 1. The shelf life is 90 days from the date of opening.

OTHER MATERIALS & SOLUTIONS REQUIRED

96 well microplates: Corning , Catalog# 42592

Coating Buffer (1×CBS): 0.015 mol/L Na₂CO₃, 0.035 mol/L NaHCO₃, 0.0077 mol/L NaN₃, pH9.59

1×Washing Buffer(1×PBST): 0.05% Tween-20 in TBS, pH7.4

Blocking Buffer: 2% BSA in 1×Washing Buffer

Dilution Buffer: 0.5% BSA in 1×Washing Buffer

Substrate Solution: InnoReagents, Catalog # TMB-S-004

Stop Solution: 2N H₂SO₄

Pre-Fusion glycoprotein F0: HRSV (A) Pre-fusion glycoprotein F0, His Tag (ACRO, Cat # RSF-V52H7)

REAGENT PREPARATION

Bring all reagents and samples to room temperature (20°C-25°C) before use.

According to Table 2, prepare the provided lyophilized product into a storage solution with ultrapure water, dissolve at room temperature for 15 to 30 minutes, and mix by gently pipetting, avoiding vigorous shaking or vortexing. The reconstituted storage solution should be stored at -70°C. It is recommended that the number of freezing and thawing should not exceed 1 time, and the size of the aliquot should not be less than 20 µg.

Table 2. Preparation method

ID	Components	Size (100 µg)	Storage solution concentration.	Reconstituted water Vol.
RAP166-C01	RSV-Pre-F0 Capture Antibody	100 µg	500 µg/mL	200 µL
RAP166-C02	HRP-RSV-Pre-F0 Detection Antibody	100 µg	400 µg/mL	250 µL

RECOMMENDED SAMPLE PREPARATION

1. Coating

Dilute RSV-Pre-F0 Capture Antibody stock solution (500 µg/mL) to 1.0 µg/mL with Coating Buffer to make RSV-Pre-F0 Capture Antibody working solution.

Add 100 µL of RSV-Pre-F0 Capture Antibody working solution (1.0 µg/mL) to each well, seal the plate with microplate sealing film and incubate overnight (or 16 hours) at 4°C.

2. Washing

Remove the remaining solution by aspiration, add 300 µL of 1×Washing Buffer to each well, gently tap the plate for 1 minute, remove any remaining 1×Washing Buffer by aspirating or decanting, invert the plate and blot it against paper towels. Repeat the wash step above for three times.

3. Blocking

Add 300 µL Blocking Buffer to each well, seal the plate with microplate sealing film and incubate at room temperature for 2.0 hours.

4. Washing

Repeat step 2.

5. Add Samples

Add 100 μ L Samples to each well. For blank Control wells, please add 100 μ L Dilution Buffer.

Note: It is recommended to set doable holes for samples and standard curves to be tested.

6. Incubation

Seal the plate with microplate sealing film and incubate at 37°C for 1 hour.

7. Washing

Repeat step 2.

8. Add HRP-RSV-Pre-F0 Detection Antibody

Dilute HRP-RSV-Pre-F0 Detection Antibody stock solution (400 μ g/mL) to 0.5 μ g/mL with Dilution Buffer to make HRP-RSV-Pre-F0 Detection Antibody working solution.

For all wells, add 100 μ L HRP-RSV-Pre-F0 Detection Antibody (0.5 μ g/mL) working solution. Please prepare it for one-time use only.

9. Incubation

Seal the plate with microplate sealing film and incubate at 37°C for 1 hour.

10. Washing

Repeat step 2.

11. Substrate Reaction

Add 100 μ L Substrate Solution to each well. Seal the plate with microplate sealing film and incubate at 37°C for 20 min, avoid light.

12. Termination

Add 50 μ L Stop Solution to each well, and tap the plate gently to allow thorough mixing.

Note: The color in the wells should change from blue to yellow.

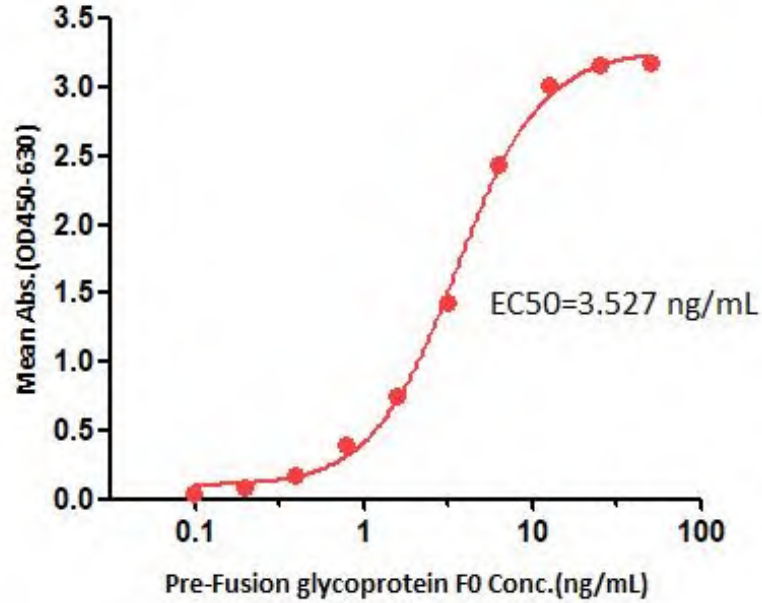
13. Data Recording

Read the absorbance at 450 nm and 630 nm using UV/Vis microplate spectrophotometer within 5 minutes.

Note: To reduce the background noise, subtract the value read at OD_{450nm} with the value read at OD_{630nm}.

TYPICAL DATA

This data is for reference only, users need to do their own method development according to the actual situation.



Immobilized RSV-Pre-F0 Capture Antibody (Cat. No. RAP166-C01) at 1.0 µg/mL (100 µL/well) can bind Pre-Fusion glycoprotein F0, and then add HRP-RSV-Pre-F0 Detection Antibody (Cat. No. RAP166-C02) at 0.5 µg/mL (100 µL/well), linear range of 0.098-6.25 ng/mL.