

ELISA Starter Kit

1. Catalog No. K0331001

2. Quantity 10 plate

3. Storage Store at 4°C. Do not freeze.

4. Description Ready to use : There is no need to prepare extra solutions separately.

- Time & Labor saving: It minimizes the effort & time to prepare the full ELISA kit.
- Colored label: It helps distinguish the solutions.
- All kit components are optimized for common ELISA test

5. Kit Contents

| component | size | Cat No. |
|--|------------------|----------|
| ELISA well plate | 10 plate | K0331011 |
| Coating Buffer (pH 9.6) | 125 ml x 2 | K0331021 |
| Blocking Solution (0.1% Casein/PBS) | 125 ml x 2 | K0331031 |
| PBS Powder | Pouch for 1L x 5 | K0331041 |
| Tween-20 (50%) | 1 ml (50%) x 5 | K0331051 |
| TMB solution | 100 ml | K0331061 |
| Stop Solution (2M H ₂ SO ₄) : Corrosive | 100 ml | K0331081 |
| Plate Sealing Film | 10ea | |

6. Reagent Preparation

- 1. Coating Solution: Resolve the coating material (antigen or antibody) in the coating buffer to make 1 ug/ml (1-10 ug/ml).
- Sample/Standard/Antibody Dilution: Dilute Sample/Standard/Antibody in PBS (Reconstitute 1ea PBS Powder Pouch to DW and make 1 Liter). Or use PBST (Washing solution) or Blocking solution instead of PBS to help prevent non-specific binding.
- 3. Washing Solution: Add 1vial of Tween (50% 1 ml Tween 20) to 1 Liter PBS and mix
- * Note: All samples and kit reagents should be at room temperature (20-25°C) prior to use.



7. Procedure

- 1. Coating
 - (1) Dispense 100 ul (50-200 ul) of prepared Coating Solution to each well.
 - (2) Incubate for overnight at 4° C.
- 2. Washing (All washing method is the same.)
 - (1) Remove the solution of each well and fill up the Washing Solution. Repeat 3-5 times. Complete removal of liquid at each step is essential to good performance.
 - (2) After the last wash, remove any remaining Washing Solution. Invert the plate and blot carefully with paper towel.
- 3. Blocking
 - (1) Add 200 ul Blocking Solution to each well.
 - (2) Incubate 1 hour at room temperature.
- 4. Washing
- 5. React Sample/Standard (or Primary Antibody)
 - (1) Add 100 ul diluted Sample/Standard (or Primary Antibody) to each well.
 - (2) Incubate 1-2 hour at room temperature.
- 6. Washing
- 7. Add HRP-conjugated Detection Antibody (or Secondary Antibody)
 - (1) Add 100 ul diluted Detection Antibody to each well.
 - (2) Incubate 1-2 hour at room temperature.
- 8. Washing
- 9. Color Reaction and Reading
 - (1) Add 100 ul of TMB solution to each well. Incubate at room temperature for a proper color development.
 - (2) After sufficient color development, add 100 ul Stop Solution (2M H₂SO₄) to each well.
 - (3) Read plates in a microwell plate reader at wavelength setting of 450 nm.

8. Cautions

- 1. Store all solutions at 4° C and keep them from contamination.
- 2. All samples and kit reagents should be at room temperature (20-25° C) prior to use.
- Complete washing of the plate after each incubation step is essential to obtaining low background values.
- 4. Dissolve antigen, standard and antibody perfectly.
- 5. Use clean pipet tips for each transfer to avoid cross contamination.
- 6. Stop solution (2M H₂SO₄) is a caustic material. Eye, hand, face, and clothing protection should be worn when handling this material.
- 7. Individual components of the assay contain no preservatives except Blocking Solution. The Blocking Solution contains 0.02% Thimerosal for longer storage. The Thimerosal is also caustic material.