



Mouse Anti ssDNA ELISA KIT

Research
Reagent

Please, read this instruction carefully before assay.

[Merit of the kit]

This assay kit can measure anti-ssDNA antibody,

- (1) Quickly (3 hours),
- (2) With a small volume of sample (1-5 μ l),
- (3) Promptly and easily with all reagents provided as solution,
- (4) With high reproducibility.

[Reagents]

A: Mouse ssDNA coated plate	96well(8x12)	x1
B: Standard Mouse-antibody solution(10000mU/ml)*	100 μ l	x1
C: HRP-conjugated anti-mouse IgG	20 μ l	x1
D: Chromogenic substrate reagent(TMB)	12ml	x1
E: Reaction stopper(1M H ₂ SO ₄)	12ml	x1
F: Buffer solution	60ml	x1
G: Concentrated washing buffer(10x)	100ml	x1

* The number of units differs among lots.

[Required but not included in the kit]

- (1) Micropipette (1-1000 μ l)
- (2) Microplate washing apparatus (microplate washer, shaker, wash bottler, etc.)
- (3) Microplate reader

[Preparation of Reagent Solutions]

- (1) Washing buffer : Prepare by diluting concentrated washing buffer to 1:10 with distilled water.
- (2) HRP-conjugated antibody solution: Prepare by diluting the concentrated

solution to 1:2,000 with assay buffer.

- (3) Other reagents can be used undiluted.
- (4) Use all the reagent solutions of the Kit after getting back to room temperature.

[Dilution of Assay Samples and Preparation of the Standard Antibody Solution] (We show an example)

- (1) Assay samples : Dilute to 1:51, 1:101, 1:201 with the assay buffer.
- (2) Standard antibody solutions: Prepare std 7 by mixing 50 μ l of attached original std solution and 450 μ l buffer. Then prepare std 6 by mixing 250 μ l of std 7 and 250 μ l buffer, and so forth until std 1 by serial dilution.

	Std 7	Std 6	Std 5	Std 4	Std 3	Std 2	Std 1	Std 0
Potency (mU/ml)	1,000	500	250	125	62.5	31.3	15.6	0
Standard solution(μ l)	50	250	250	250	250	250	250	0
Assay buffer(μ l)	450	250	250	250	250	250	250	250

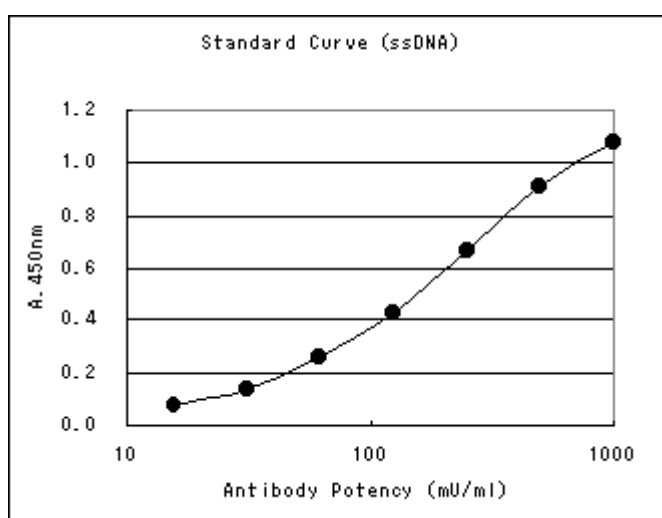
Please, avoid using NaF-containing blood sampling tube, because fluoride ion is a peroxidase inhibitor, and may reduce the coloration even after washing.

[Assay Procedure]

- (1) Wash the assay plate 3 times with the washing buffer by filling the wells with the buffer and discarding. Thereafter, hold the plate upside-down and tap several times on the stacked several sheets of paper towel to remove excess buffer remaining in wells.
- (2) Place 100 μ l of the standard antibody solution or diluted sample to each well.
- (3) Shake gently using preferably a microplate shaker.
- (4) Stand the plate for 1 hour at room temperature (20-25C) for the reaction.
- (5) After the reaction, discard the solution, and rinse the plate 3 times with the washing buffer. Thereafter, hold the plate upside-down and tap several times on the stacked several sheets of paper towel to remove excess buffer remaining in wells.
- (6) Pipette 100 μ l of the HRP-conjugated antibody solution to each well, and shake gently using preferably a microplate shaker.
- (7) Stand the plate for 1 hour at room temperature (20-25C) for the reaction.
- (8) After the reaction, discard the solution, and rinse the plate 3 times with the washing buffer. Thereafter, hold the plate upside-down and tap several times on the stacked several sheets of paper towel to remove excess buffer remaining in wells.

- (9) Pipette 100 μl of the chromogenic substrate (TMB) reagent to each well, and shake gently on a microplate shaker.
- (10) Stand the plate for 20 minutes at room temperature (20-25C) for the reaction.
- (11) Pipette 100 μl of the reaction stopper to each well to stop further color development.
- (12) Measure absorbance of each well at 450 nm (Sub wavelength, 620nm).

[Standard Curve (an example)]



[Summary of Assay Procedure]

Antigen-coated plate

Washing

| + Standard antibody solution or diluted sample; 100 μl

Shaking, Reaction at room temp.(20 - 25C) for 1hr

|

Washing

| + HRP-conjugated antibody; 100 μl

Shaking, Reaction at room temp.(20 - 25C) for 1hr

|

Washing

| + Chromogenic substrate (TMB) reagent solution; 100 μl

Shaking, Reaction at room temp.(20 - 25C) for 20min

| + Reaction stopper; 100 μl

Measurement of absorbance (450nm) (Sub 620nm)

[Assay Validation]

1. Assay range

Absorbance range corresponding to standard concentration 15.6 to 1000mU/ml is 0.05 to 2.5

2. Specificity

As anti-mouse IgG type antibody is labeled with HRP, crossreactivity to IgM is lower than ELISA background.

3. Assay precision

Within assay C.V. (n=30) is 4.6%

4. Reproducibility

Between assay C.V. (n=30, 3days) is 4.9%

Please, read ["Statements and Precautions as to Our Kits or Their Components"](#) in a separate page for further information .

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