Super WB Femto Sensitivity Substrate

Cat #: D-AKE102

Size: 500 mL

Storage: Stored at 4°C ,stable for 2 years from date of shipment,protected from light.

Assay Principle

Super WB Femto Sensitivity Substrate is a non-radioactive (horseradish peroxidase) luminescence system designed to detect femtogram-level trace proteins immobilized on a solid membrane (such as NC, PVDF, etc.). It is an experimental auxiliary reagent for the photosensitive recording of its immunoblotting by X-ray film (radiograph).

Advantages	Mechanism	Application
High sensitivity	Add unique immune signal enhancement components	Easier to obtain detection signals, better detection of low-abundance proteins (femtogram level)
Signal stability	The signal is strong and lasts for 4 hours	The signal is more stable, the signal can still be obtained after 4h color development of the signal film
Easy operation	Contains optimized antibody stabilization components	Increase the storage time of the diluted antibody, and can be used repeatedly
High compatibility	Suitable for PVDF membrane and NC membrane	Good compatibility with a variety of membrane types, worry-free use
Stable performance	Stored at 4°C for two years, there is no difference in color rendering effect	Can be stored for two years without affection on use
Universal detection	Can be detected with X-ray film and chemiluminescence imager	Can get good results through a variety of instruments

Application suggestion：

1.Routine electrophoresis, membrane transfer, HRP-labeled antibody incubation, and membrane washing. It is recommended to use Super Antibody Dilution Buffer (D-AKE103) to dilute the antibody.

2.The diluted antibody should be stored at 4°C immediately after the antibody incubation, so that it can be reused later. While washing the HRP-labeled secondary antibody on the membrane, freshly prepare the luminescence working solution, and mix the two reagents at 1:1 ratio to prepare the working solution.

3.If the size of the blotting membrane is 1 cm^2, it is recommended to use 0.1-0.2 ml of Super WB Femto Sensitivity Substrate working solution.

4.Incubate in the ECL working solution for 1-5 minutes.

5.Clamp the membrane with tweezers, and gently touch the lower edge of the membrane with the filter paper to remove excess luminescent liquid on the membrane. Cover the blotting membrane with a transparent plastic wrap.

6.Expose to X-ray film or take photos by chemiluminescence imager.

Experiment results display

Fig. The sample is Mouse TNF-alpha protein (PRP1113, 17KD)

Precautions

1.Do not mix components from different batch numbers and different manufacturers; otherwise, it may cause abnormal results.

2.In order to obtain the best experiment results, you need to optimize all of your experiment elements, including the number of samples, antibody concentration, as well as the use of membranes and blocking reagents.

3.Mix the two substrate components at 1:1 ratio to prepare a substrate working solution. Please pay attention to change the tips during the aspiration process of A and B solution.

4.Super WB Femto Sensitivity Substrate has a long chemiluminescent duration, but it is best to perform compression or imaging within 30 minutes of color development.

5.It is recommended that every 1 cm^2 membrane corresponds to 0.1-0.2 mL Super WB Femto Sensitivity Substrate working solution (femtogram level).

FAQ

1. Can Super WB Femto Sensitivity Substrate be reused?

A: Repeated use is not recommended. The correct way is to add the ECL working liquid drops to the film, make it evenly covered on the film and then expose it on the machine.

2.In the process of color development, occasionally have exposure to reverse white phenomenon, what is the reason?

A : This phenomenon is due to the high protein abundance, the high concentration of HRP in the central part of the chromogenic substrate will be consumed instantaneously, resulting in non-luminescence. Suggestions: (1) Reduce the loading amount of protein and the concentration of primary and secondary antibody; (2) Reduce incubation time of luminescent liquid and shorten exposure time;

2. What is the protein detection range of the luminescent solution?

A: Our company verified that the color developing solution had the best effect in the protein expression range of 6.25-50 pg.

Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.