SuperKine™ West Femto Maximum Sensitivity Substrate

Cat #: BMU102-EN Size: 100 mL/500 mL

	Product Name: SuperKine™ West Femto Maximum Sensitivity Substrate		
REF	**Catalog Number:** BMU102-EN	LOT	**Lot Number:** Refer to product label
	Formulation: Liquid, ready to use		**Applications:** WB, IP
	Storage: Protected from light, store at 4°C, stable for 2 years from date of shipment		**Note:** No

Product Application

Assay principle: After years of development on chemiluminescence technology, there have been a variety of luminescence systems, but the most commonly used one in laboratories is still a technology system based on Luminol or its derivatives (isoluminol, etc.). Western luminescent detection reagent ECL immunoblotting chemiluminescence solution 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℃ 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 SuperKine™ Enhanced Antibody Dilution Buffer (BMU103-EN) to dilute the antibody. Universal Loading Control Antibody Cocktail (KTD101-EN) is used for the sample internal reference detection. It is recommended to use HRP-labeled IgG, such as, HRP goat anti-rabbit secondary antibody (A21020).
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 SuperKine™ West Femto Maximum

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.

Highlight moment: Except the West Femto Maximum Sensitivity Substrate, there are many ways to improve the signal of immunological experiments, such as using SuperKine™ Enhanced Antibody Dilution Buffer (BMU103-EN) in WB experiment, choosing DyLight, IFKine™ specialized secondary antibodies in IF experiment, or adopting high-quality animal serum, these are all pretty good options. Scan the QR code on the right side to view more Abbkine product information.

Experiment results display:

Fig. The sample is Mouse TNF-alpha protein (PRP1113, 17KD), the primary antibody is TNF-α Polyclonal Antibody (ABP0127, 1:2500), and the secondary antibody is HRP, Goat Anti-Rabbit IgG (A21020, 1:10000). The exposure time is 30s.

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. SuperKine™ West Femto Maximum 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 SuperKine™ West Femto Maximum Sensitivity Substrate working solution (femtogram level).

FAQ:

1. Can BMU102-EN 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; (3) Change to ECL color developing solution with low sensitivity, such as: BMU101-EN.

3. 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.

Recommended Products:

Catalog No.	Product Name	Recommended Reason
BMU101-EN	SuperKine™ West Pico PLUS Chemiluminescent Substrate	Sensitive, efficient, stable signal
BMU103-EN	SuperKine™ Enhanced Antibody Dilution Buffer	Sensitive, stable performance, wide application

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