Product Information & Manual

UltraScence Femto Plus Western Substrate

NBP3-33178

Contact

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Novus kits are guaranteed for 6 months from date of receipt.

For research use only. Not for diagnostic or therapeutic procedures.

UltraScence Femto Plus Western Substrate

Storage Conditions

Stable for up to 24 months at 4°C, do not freeze it.

Shipping Condition

Ship at 4°C, beware of shipping in any condition beneath 0°C.

Description

The UltraScence Femto Plus Western Substrate, as a luminol-based enhanced chemiluminescent substrate, is sensitive and compatible with conducting immunoblots with horseradish peroxidase (HRP) – conjugated secondary antibodies. The UltraScence Femto Plus Western Substrate is designed for the detection of the target proteins in amounts that are too small to be seen with typical ECL substrates. The **mid femtogram to low femtogram detection** of antigen is enabled by UltraScence Femto Plus Western Substrate' s excellent sensitivity and long signal duration. Further, its long chemiluminescent signal duration makes both digital and film-based imaging possible without any loss of the signal. Appropriate primary and secondary antibody dilutions are suggested for attaining optimal signal intensity and duration. Moreover, the high stability of UltraScence Femto Plus Western Substrate makes a 2-year- storage at 4℃ possible, without any compromise on the performance.

Kit Content(s)

Catalog Number	Size
Luminol Solution	50 ml x 1
Peroxide Solution	50 ml x 1

Required materials but not provided

- A compatible Chemiluminescence or X-ray Imaging Systems
- A plastic sheet protector or plastic wrap to prevent the membrane from drying

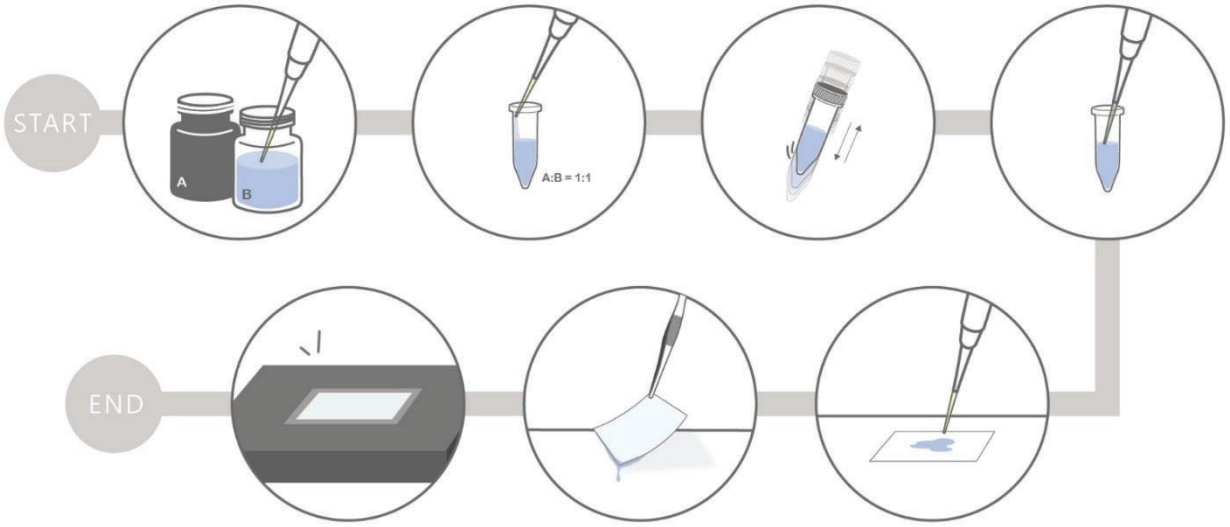
Instrument Compatibility

This western substrate is compatible with the majority of commercially available Chemiluminescence and X-ray Imaging Systems.

Reaction Setup

Keep the membrane moist in the wash buffer while preparing the substrate mixture. Please ensure the membrane does not dry out during the subsequent steps.

1. Mix Luminol solution and Peroxide Solution in a 1:1 ratio, and thoroughly agitate the chemiluminescent substrate solution well for preparing the 0.1 ml of solution / cm^2 of membrane.
   - For a mini-sized membrane (7 x 8.5 cm), 4 ml of solution is sufficient.
   - For a midi-sized membrane (8.5 x 13.5 cm), 10 ml of solution is sufficient.
2. Place the membrane with the protein side up on a clear and level surface or in a clean container.
3. Remove the membrane from the chemiluminescent substrate solution and drain off excessive solution.
4. Place the membrane in a plastic sheet protector or in plastic wrap to prevent the membrane from drying.
5. Image the membrane with a digital imager or by exposing to the X-ray film.



Troubleshooting

Problem	Cause	Solution
High Background	Overconcentrated primary or secondary antibody	*Decrease the antibody concentration.
		*Perform a dot blot to optimize the concentration.
	Insufficient wash	*Increase the frequency or duration.
	Incomplete blocking	*Decrease the antibody concentration.
		*Perform a dot blot to optimize the concentration.
No Reaction or Weak Signal	Insufficient antigen binding	*Decrease antibody concentration. *Optimize blocking reagents for achieving a balance between sensitivity and specificity.
	Poor antibody binding to the antigen	*Optimize detergent used for antibodies. *Increase the antibody incubation time.
No Reaction or Weak Signal	Proteins washed from the membrane during assay	*Reduce the number or intensity of wash
	Insufficient reagent volume	*Apply additional volumes of antibody blocking reagent or wash solution.