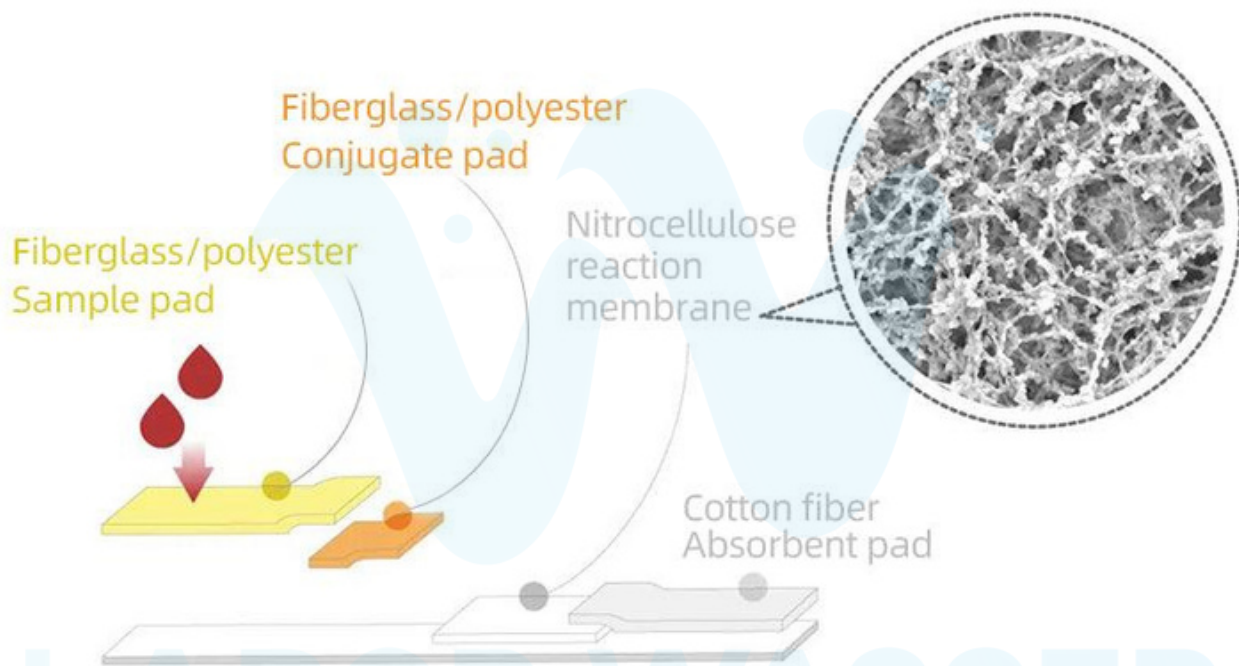


NC140C Nitrocellulose (NC) Membrane for Lateral Flow Immunochromatography Tests

A lateral flow test strip includes 4 components of porous structure: a sample pad, a conjugate pad, a reaction membrane (NC) pad, and an absorption pad.

The nitrocellulose membrane (NC) reaction pad carries immuno-capturing reactions, and is the most critical component in a test strip. Specific biological assay components, such as antibodies or antigen immobilized in bands, can capture conjugate and analyse that wick along the test strip to form the control line and the test line.



Cobetter offers NC membranes with different capillary velocities. The capillary speed of NC140C is slightly slower and the response time is longer, making higher detection sensitivity possible. They're specifically designed to improve the sensitivity and robustness of the various lateral flow assays. Multiple product options with different capillary speeds and pore sizes are available for specific assay requirements.

Features

- High porosity, high protein-binding, high sensitivity and rapid detection.
- Extremely hydrophilic. Instant wetting with uniform pore structure to ensure a consistent lateral flow rate.
- Multiple options in pore sizes and capillary speeds.
- Uniform thickness, smooth surface, and evenly distributed pore size ensure consistent assay performance.



- Consistent assay result that are easy to read.
- Length and width of membrane are customizable.

Application

- Infectious Disease Tests
- Myocardial and Inflammatory Tests
- Early Pregnancy Tests
- Drug Detection Tests
- Food and Pesticide Tests

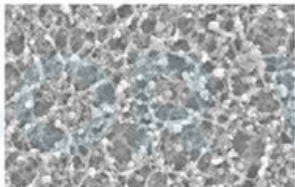
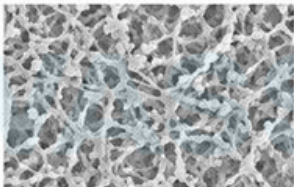
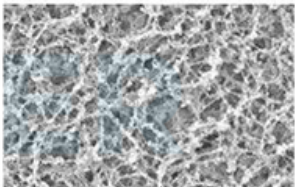
Cobetter NC Membrane Applications-Detection Technologies

Lateral flow immunoassays:

- Colloidal Gold Immunochromatography Assay (GICA)
- Latex Immunochromatography Assay
- Fluorescence Immunochromatography Assay

Performance Analysis and Comparison

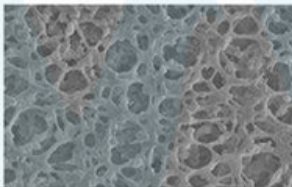
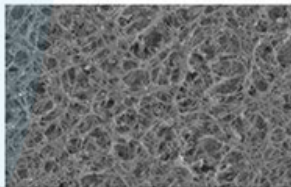
Membrane property comparison of Cobetter NC140C with other products

		American M company 135	German S company 140	Cobetter NC140C
SEM images				
Membrane properties (average)	Capillary Speed (s/4cm)	125	132	134
	Coating Thickness (excluding backing) (μm)	124	155	157
	Backing Thickness (μm)	55	119	120
	Protein Binding (IgG)/μg/cm ²	24	27	34
	Porosity (%)	77	78	81

Performance comparison of Cobetter NC140C with a competitor's product

		German S company 140	Cobetter NC140C
Sample test images			
	Control line	Sharp	Sharp
Sample assay results	Test line sensitivity	High	High
	Blurred line	No	No
	Background	Low	Low

Membrane property comparison of Cobetter NC95C with a competitor's product

		German S company 95	Cobetter NC95C
SEM Images			
	Capillary Speed (s/4cm)	79	85
Membrane properties (average)	Coating Thickness (excluding backing) (μm)	159	116
	Backing Thickness (μm)	108	131
	Protein Binding (IgG)/μg/cm ²	28	28
	Porosity (%)	75	71

* Based on the analysis of membrane properties and SEM Images, the Cobetter NC140C and NC95C membranes demonstrated equal or better performance than other main stream products.