uMarker™ Western Blot Marker

Cat. No.	Size
803-01-20	20 Lanes/100μl
803-01-50	50 Lanes/250μl
803-01-100	100 Lanes/500μl
803-01-250	250 Lanes/625μl×2

【Storage】: Store at -20 °C ~ -40 °C.

【Shipment】: Shipping with ice packs.

【Storage Buffer】: 125 mM Tris-HCl, pH 6.8, 10 mM DTT, 2 mM EDTA, 2 % (W/V) SDS, 10 % (W/V) Glycerol, 0.01 % (W/V) Bromophenol blue

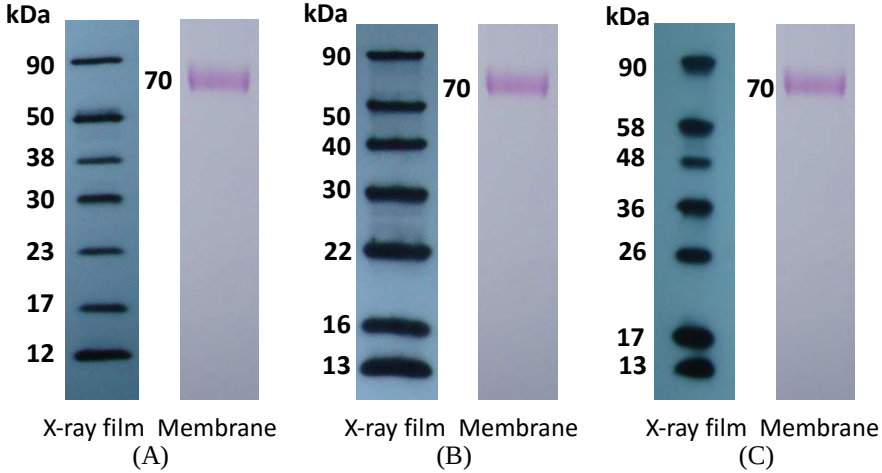
【Description】

uMarker™ Western Blot Marker is designed for Western blot, which can be used to monitor the electrophoresis progress conveniently and to visualize protein standard bands directly on the X-ray film. It consists of eight recombinant proteins in the range of 12-90 kDa. The 70 kDa protein is a pre-stained marker used for monitor of the electrophoresis process and evaluation of Western transfer efficiency. The other seven markers can bind to human, mouse, rat, goat, sheep and rabbit IgG with their IgG banding site, allowing direct visualization of markers on the X-ray film after ECL development.

【Direction for Use】

1. Thaw at room temperature and mix gently.
2. Load 1-5 μl uMarker™ Western Blot. We recommend testing different loading amounts of the standards to determine the optimal amount to use under your experimental conditions.
3. After electrophoresis, transfer proteins to a NC or PVDF membrane.
4. Perform the blocking step followed by incubating with primary antibody and secondary antibody.
5. After the thorough washing, incubate membrane with ECL reagent, and then expose the X-ray film in the dark room.
6. uMarker™ Western Blot Marker is stable at 4 °C for six month. Please put at -20 °C for long term storage.

【Examples】



A. 12 % Glycine-SDS-PAGE gel (10 well)
B. 12 % Tricine-SDS-PAGE gel (10 well)
C. 4-20 % Glycine-SDS-PAGE gel (15 well)
5 μl of Marker was loaded, transferred to a NC membrane, and detected using rabbit polyclonal antibody and goat anti rabbit antibody-HRP, respectively.

【Troubleshooting】

Observation	Cause	Solution
High background	Insufficient blocking	Prolong the blocking time; choose the suitable blocking reagents
	Contaminated membrane or transfer buffer	Wear gloves in the transfer process and keep the environment clean
	Concentration of primary antibody is too high	Increase dilution of primary antibody
	Temperature is too high during primary antibody incubation	4 °C incubation over night
	Long time exposure	Shorten the time of exposure
Weak or no signal	Low amount of loaded standards	Load a higher amount of standard on the gel
	Incomplete or over transfer	Optimize the transfer time and current
	Low quality antibody or short time incubation	Replace with new antibody or extend incubation time
	Ineffective ECL reagents	Make sure the detection reagents are freshly made
Too strong or multiple bands	Too much primary of secondary antibody	Optimize the concentration of antibody
	Overloading	Reduce amount of standard loaded onto the gel
	Nonspecific binding	Improve blocking efficiency and choose specific antibody

Note: We recommend using a Tris-Tricine SDS-PAGE system for high quality results.

PrimeGene™ a bio-techne brand

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