

# VisiMax™ Dual Marker

Cat. No. CSR-VIS-001L, CSR-VIS-002H, CSR-VIS-003W

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# [1] Product Description

VisiMax<sup>™</sup> Dual Marker is the protein ladder marker for the exclusive use in western blot. The marker reacts with antibody used in western blot and detected by Enhanced Chemiluminescence (ECL) or other substrate.

# [II] Product Lineup

Cat. No.	Description	Quantity
CSR-VIS-001L	VisiMax <sup>™</sup> Dual Marker Low (21, 30, 45, 53, 65, 72, 115kDa)	250uL
CSR-VIS-002H	VisiMax <sup>™</sup> Dual Marker High (43, 53, 65, 72, 95, 115, 130, 150, 190kDa)	250uL
CSR-VIS-003W	VisiMax <sup>™</sup> Dual Marker Wide (21, 30, 43, 65, 72, 95, 130, 190kDa)	250uL

Storage: -20 °C

# [III] Protocol

## 1. Apply to SDS-PAGE gel

Bring  $VisiMax^{TM}$  Dual Marker to room temperature before use.

Apply 2 - 5 uL of VisiMax<sup>™</sup> Dual Marker to gel wells along with your pre-treated sample, and separate proteins by electrophoresis.

#### 2.Blotting to membranes

Take out the gel, set on the blotting apparatus, and transfer proteins to the membrane.

Confirm that the blue-colored proteins can be seen in marker lane on the transferred membrane (refer to the figure 1).

## 3. Blocking

Treat membranes with appropriate blocking solution.



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#### 4. Primary antibody reaction

Treat membrane with appropriate primary antibody solution. Primary antibody also binds to marker proteins during the reaction.

\*note 1: Do not use any serum contained antibody diluted buffer.

#### 5. Secondary antibody reaction

Treat membrane with appropriate enzyme-labeled secondary antibody solution. Secondary antibody also binds to marker proteins directly or via the bound primary antibody during the reaction.

\*note 2: As the labeled enzymes on secondary antibody, HRP (Horse Radish Peroxidase) or AP (Alkaline Phosphatase) can be used.

#### 6. Detection

Detect secondary antibody-bound target and marker proteins by ECL reagents or by other ways. The marker proteins generate signals as does the target proteins, and are detected at the same time as is target protein.

\*note 3: Principally, the marker proteins can be detected by colorimetric, fluorimetric methods. With ECL method, detection by X ray film other than CCD camera method is also possible.

#### 7. Identification of marker proteins

Signal intensities of marker proteins are designed to be different each other.

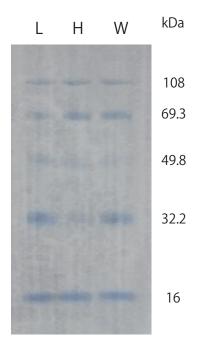
For example, 21 kDa protein shows strong signal, 30 kDa protein weak, and 190 kDa

protein strong. The bands of 65 and 72 kDa proteins are in close proximity. These are good marks for identifying MW.

\*note 4: Higher antibody concentration, which intensify marker signal, may cause additional band (refer to (V) Others for detail).

\*note 5: The signal strength of marker is dependent on the origin (animal species) of antibody.

# (IV) Experimental Examples



All western marker products contain blue-colored proteins with MW range of 16 to 108 kDa

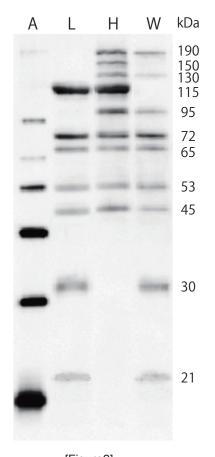
Lane L: VisiMax™ Dual Marker Low (21 - 115kDa)

Lane H: VisiMax™ Dual Marker High ( 43 - 190kDa )

Lane W: VisiMax™ Dual Marker Wide (21 - 190kDa)

[Figure1]

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Applied 5uL of each VisiMax $^{\text{TM}}$  Dual Marker and detected by

Lumitera (Cat.No. CSR-LUM-100) Lane A: Competitor ( 20 - 220kDa )

Lane L: VisiMax™ Dual Marker Low (21 - 115kDa)

Lane H: VisiMax™ Dual Marker High ( 43 - 190kDa )

Lane W: VisiMax™ Dual Marker Wide ( 21 - 190kDa )

[Figure2]

# [V] Others

Higher antibody concentration, which intensify marker signals, may cause additional bands (Low: 20, 46, 60 kDa, High: 60, 105 kDa, Wide: 20, 60,115 kDa), but there are no problems with the quality.

# **[VI]** Related Products

To raise western blotting sensitivity and keep background low.

Cat. No.	Description	Quantity
CSR-IS-012-250	IMMUNO SHOT Reagent 1&2	1 KIT

# Lumitera

Cat. No.	Description	Quantity
CSR-LUM-015S	Lumitera	15 ML
CSR-LUM-100	Lumitera	100 ML