NZYColour Protein Marker II

Catalogue number:

MB09002, 125 lanes
MB09003, 4 x 125 lanes

Description

NZYColour Protein Marker II is a ready-to-use mixture of 12 highly purified pre-stained proteins, covering a wide range of molecular weights from 11 to 245 kDa, designed to monitor protein separation during sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE). Proteins are covalently coupled with a blue chromophore except for two reference bands (one green and one red band at 25 kDa and 75 kDa respectively). The NZYColour Protein Marker II is visible during the electrophoresis run. NZYColour Protein Marker II is recommended for verification of Western transfer efficiency on membranes (PVDF, nylon, or nitrocellulose) and protein molecular weight determination.

Storage conditions

NZYColour Protein Marker II should be stored at -20 °C. It is stable for up to three months at 4°C.

Components

Protein mixture supplied in gel loading buffer. Proteins are covalently coupled with a chromophore, generating blue bands, except the 25 and 75 kDa proteins, which generate green and red bands, respectively.

Gel loading

Load directly 3-5 µL per lane. Before use, mix well. Do not heat, dilute or add reducing agents before loading.

Electrophoresis and Detection

Perform electrophoresis according to the instructions supplied with the gel apparatus being used. Stain the gel using BlueSafe (MB15201).

Molecular weight determination

Measure the migration distance of the proteins in the NZYColour Protein Marker II and of the protein(s) of interest. Measure the migration distance of the dye marker. Calculate the corresponding Rf values by dividing migration distance of the protein by migration distance of the dye marker. Construct a calibration curve by graphing Rf vs. log molecular weight for the proteins in the NZYColour Protein Marker II. Determine the molecular weight of the protein(s) of interest from the calibration curve.

Quality control assay

Purity

5 µL of NZYColour Protein Marker II is electrophoresed in a 10% Tris-glycine SDS-PAGE to check the intensity and the pattern

of the bands. It is expected to observe 12 regularly spaced bands, as presented in Figure 1.

Figure 1. NZYColour Protein Marker II was loaded on a 10% Tris-glycine SDS-PAGE. Size, in kDa, of proteins in each lane is shown.

Troubleshooting

If Marker is not sinking upon loading
Vortex briefly before loading
To prevent contamination after opening
Make aliquots with a small quantity of the ladder
If precipitation is verified
Incubate at 60 ºC for 5 min.

V1902

Certificate of Analysis

Assay	Result
Purity	Pass

Approved by:

Patrícia Ponte
Senior Manager, Quality Systems

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