



# NZYColour Protein Marker I

## Catalogue number:

MB21501, 125 lanes

MB21502, 4 x 125 lanes

## Description

NZYColour Protein Marker I is a ready-to-use mixture of 13 highly purified pre-stained proteins, covering a wide range of molecular weights from 5 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 I is visible during the electrophoresis run. NZYColour Protein Marker I is recommended for verification of Western transfer efficiency on membranes (PVDF, nylon, or nitrocellulose) and protein molecular weight determination.

## Storage conditions

NZYColour Protein Marker I 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 I 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 I. Determine the molecular weight of the protein(s) of interest from the calibration curve.

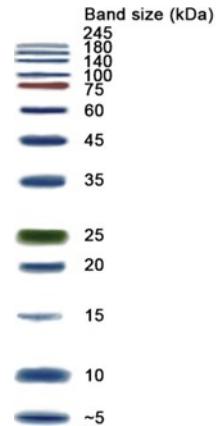
## Quality control assay

### Purity

5 µL of NZYColour Protein Marker I is electrophoresed in a 10% Tris-glycine SDS-PAGE to check the intensity and the pattern of the bands. It is expected to observe 13 regularly spaced bands, as presented in Figure 1.

## Troubleshooting

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



**Figure 1.** NZYColour Protein Marker I was loaded on a 10% Tris-glycine SDS-PAGE. Protein size, in kDa, is shown.

V1902

### Certificate of Analysis

Assay	Result
Purity	Pass

Approved by:

Patrícia Ponte  
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