MB090_IFU_EN_V2401

# NZYColour Protein Marker II,11-245 kDa

| Catalogue number | Presentation |
|---|---|
| MB09002 | 1 x 500 µL (125 lanes) |
| MB09003 | 4 x 500 µL (500 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, specially designed for protein molecular weight estimation through SDS-PAGE electrophoresis. The NZYColour Protein Marker II is visible during the electrophoresis run, recommended for verification of Western transfer efficiency on membranes (PVDF, nylon, or nitrocellulose) and protein molecular weight determination. The molecular mass of the protein under investigation is determined by comparing its electrophoretic mobility with that of proteins contained in the marker.

## Shipping & Storage Conditions

This product can be shipped at a range of temperatures from dry ice to blue ice. After delivery, product should be stored at -85°C to -15°C. This marker is stable enough to allow to be stored at 4°C for short-term storage for up to 3 months. However, to ensure its sustained stability, it is strongly advisable to prepare and store small-volume aliquots of the marker at -85 to -15 °C. NZYColour Protein Marker II will remain stable till the expiry date if stored as specified.

## Components

| | MB09002 (125 lanes) | | MB09003 (500 lanes) | |
|---|---|---|---|---|
| **COMPONENT** | **TUBES** | **VOLUME** | **TUBES** | **VOLUME** |
| NZYColour Protein Marker II | 1 | 500 µL | 4 | 500 µL |

## Specifications

**Size range:** 11 kDa to 245 kDa

**Number of bands:** 12

**Size of bands**: 11 kDa, 17 kDa, 20 kDa, 25 kDa (green), 35 kDa, 48 kDa, 63 kDa, 75 kDa (red), 100 kDa, 135 kDa, 180 kDa, 245 kDa

## Standard Protocol

1. Load directly 3-5 µL per lane. Before use, mix well. Do not heat, dilute or add reducing agents before loading.
2. Perform electrophoresis according to the instructions supplied with the gel apparatus being used. Stain the gel using appropriate staining solution, such as the BlueSafe (NZYtech, Cat. No. MB15201).

## Technical Notes

**Acrylamide**

A range of 10-15% acrylamide SDS-PAGE gel concentration is recommended. This range allows for optimal resolution of protein bands within this size range during electrophoresis.

**Molecular Weight determination**

Measure the migration distance of the protein markers 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.

## Data

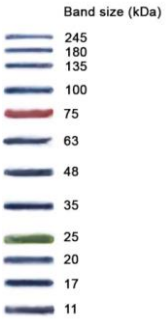


**Figure 1.** NZYColour Protein Marker II stained with BlueSafe (NZYtech, Cat. No. MB15201). The gel was loaded with 5 µL of NZYColour Protein Marker II standard per lane on a 10% Tris-glycine SDS-PAGE.

## Quality control assays

**Electrophoretic Pattern (Marker)**

5 µL of NZYColour Protein Marker II is electrophoresed in a 10% (v/v) Tris-glycine SDS-PAGE to check the intensity and the pattern of bands. It is expected to observe 12 regularly spaced bands as presented in Figure 1 above.