



NZYBlue Protein Marker

Catalogue number:

MB17601, 125 lanes

MB17602, 4 x 125 lanes

Description

NZYBlue Protein Marker is a ready-to-use mixture of 11 highly purified pre-stained proteins, covering a wide range of molecular weights from 10 to 180 kDa, designed to monitor protein separation during sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE). Proteins are covalently coupled with a blue chromophore, and two reference bands (at 25 kDa and 72 kDa respectively) are enhanced in intensity when separated on SDS-PAGE (Tris-glycine buffer). The NZYBlue Protein Marker is visible during the electrophoresis run. NZYBlue Protein Marker is recommended for verification of Western transfer efficiency on membranes (PVDF, nylon, or nitrocellulose) and protein molecular weight determination.

Storage conditions

NZYBlue Protein Marker 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 blue chromophore, and two reference bands (25 kDa and 72 kDa) are enhanced in intensity when separated on SDS-PAGE.

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

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 °C for 5 min.

Quality control assay

Purity

5 μ L of NZYBlue Protein Marker is electrophoresed in a 10% Tris-glycine SDS-PAGE to check the intensity and the pattern of the bands. It is expected to observe 11 regularly spaced bands, as presented in Figure 1.

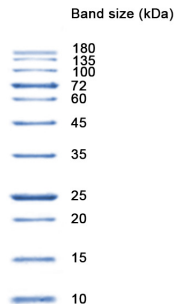


Figure 1. NZYBlue Protein Marker was loaded on a 10% Tris-glycine SDS-PAGE. Size, in kDa, of proteins in each lane is shown.

V1901

Certificate of Analysis

Assay	Result
Purity	Pass

Approved by:

Patricia Ponte
Senior Manager, Quality Systems

For research use only.



nzytech

genes & enzymes

Estrada do Paço do Lumiar, Campus do Lumiar - Edifício E, R/C, 1649-038 Lisboa, Portugal

Tel.: +351.213643514 Fax: +351.217151168

www.nzytech.com