

MapMarker®1000 MW-0195-80ROX • MW-0195-80TMR • MW-0195-80FAM

MapMarkers® are sets of high quality fluorescently labelled DNA fragments designed to provide consistent intensities and migration patterns for DNA sizing standards. They are compatible with most of fluorescent based separation instruments systems.

Labelling

Either labelled with the x rhodamine (ROX), tetramethylrhodamine (TMR) or fluorescein (FAM) at 8 fmol/band/µl.

Package content

Reagent	References	Description
MapMaker®1000 800 lanes, 400 μl 8 fmol/band/μl	MW-0195-80ROX MW-0195-80TMR MW-0195-80FAM	Labelled with: x rhodamine tetramethylrhodamine fluorescein
Tracking Dye	-	Tracking Dye contains 25 mg/mL blue dextran (average Molecular Weight of 2 000 000) dissolved in 25 mM EDTA

Description

MapMarker®1000 contains 23 single stranded DNA fragments, ranging in size from 50 to 1000 base pairs and labelled with a single fluorophore. The exact fragment sizes are: 50, 75, 100, 125, 150, 200, 250, 300, 350, 400, 450, 475, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950 and 1000 base pairs.

MapMarkers® are evaluated for resolution, intensity and background on capillary electrophoresis instrument using laser excitation. MapMarkers® are free of extraneous peaks over their entire sizing range and are free of "pull up" signal in other channels.

MapMarkers® may be used under either denaturing or non denaturing conditions.

MapMarkers® are compatible with many fluorescent based instrument systems, as well as a wide variety of fluorescent dyes including TAMRA, ROX, FAM, Cy5® equivalent and more.

Recommendation for use

The tracking dye could be utilized on any gel-based instrument. It is however not necessary when using a capillary or electrophoresis instrument.

Sample Preparation

For each sample combine $0.5~\mu L$ of MapMarker®, $0.5\mu L$ of Tracking Dye, $2.5~\mu L$ of dionized formamide and $1-2~\mu L$ of sample. A Master Mix can be prepared by adjusting the above component volumes to the number of samples to analyze. After the sample is added to the MapMarker/Tracking Dye/Formamide mix, the solution should be briefly vortexed followed by brief centrifugation and denatured at $95^{\circ}C$ for 5~minutes.

The solution is then cooled to 4°C.

Load from $1\,\mu L$ to $3\,\mu L$ of this mixture per lane. The volume depends on the well capacity.

Storage

MapMarkers® are stable for a minimum of 18 months when stored in the dark at 4 ° C

