DNA marker 200-1500 coloured

(Catalogue number C150, C151, C152)

Description

Estimation of the size of DNA fragments generated in PCR (PCR fragments) or by DNA cutting by restriction enzymes (restriction fragments) is usually based on the comparison of these fragments with DNA fragments of known size (DNA markers). Size of PCR fragments is usually in the range 200-1500 base pairs. This range is covered by DNA fragments, which are part of DNA marker 200-1500 coloured (Fig. 1). These fragments were produced by the amplification of plasmid DNA of different length. DNA marker is supplemented with the dye and additives and therefore can be loaded directly into agarose gel.

Technical data

Concentration

• 0.83 μg DNA/10 μl buffer (10 mM Tris-HCl, 25 mM EDTA, additives).

Packaging

• 1 tube containing 25 μ g of amplified DNA fragments in 300 μ l of buffer. This amount enables preparation of 30 (each 10 μ l) or 60 (each 5 μ l) markers.

Storage

• Store at temperature $-20 \pm 4^{\circ}$ C. Material can be repeatedly defrosted.

Quality control

• The presence of corresponding fragments is controlled by electrophoresis in agarose gel supplemented with ethidium bromide (1 μg/ml). When observed under UV light, 9 DNA fragments are observed (200, 300, 400, 500, 600, 800, 1000, 1200, 1500 bp). 500 bp fragment is present in 2x higher amount (see Fig. 1).

Protocol

Recommended protocol for the determination of the size of PCR products

 $10 \,\mu l$ of DNA marker 200-1500 coloured can be loaded directly into the wells of a gel prepared from PCR agarose (Cat. No. P 045).

Load into nearby wells the samples prepared by mixing:

- 10 μl PCR product,
- 3 μl PCR loading buffer (Cat. No. P066)

- 1500 - 1200 - 1000 - 800 - 600 - **500** - 400 - 300 - 200

Fig. 1. Electrophoretic separation of components of DNA marker 200-1500 coloured. 10 μ l of DNA marker coloured was directly loaded into wells of 1.2% agarose gel, which contained ethidium bromide (1 μ g/ml) and 1x TBE buffer. The numbers on the left represent the number of base pairs in the corresponding DNA fragments.

Cat. No.	Product name and specification	Amount
C150	DNA marker 200-1500 coloured	25 μg/300 μl
C151	DNA marker 200-1500 coloured	5x 25 μg/300 μl
C152	DNA marker 200-1500 coloured	20x 25 μg/300 μl

