

For life science research only.  
Not for use in diagnostic procedures.



# DNA Molecular Weight Marker VI

 **Version: 09**

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Fragment sizes: 0.15 to 2.1 kbp  
pBR328 DNA × Bgl I and pBR328 DNA × Hinf I digested

**Cat. No. 11 062 590 001**    50 µg  
   200 µl  
   50 gel lanes

**Store the product at -15 to -25°C.**

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# 1. General Information

## 1.1. Contents

Vial / bottle	Label	Function / description	Content
1	DNA Molecular Weight Marker VI	<ul style="list-style-type: none"> <li>Ready-to-use solution in 10 mM Tris-HCl, 1 mM EDTA, pH 8.0, (250 µg/ml).</li> <li>50 µg corresponds to 1 A<sub>260</sub> unit.</li> </ul>	1 vial, 50 µg (200 µl)

## 1.2. Storage and Stability

### Storage Conditions (Product)

When stored at –15 to –25°C, the product is stable through the expiry date printed on the label.

Vial / bottle	Label	Storage
1	DNA Molecular Weight Marker VI	Store at –15 to –25°C. After thawing, store at +2 to +8°C. <b>⚠ Avoid repeated freezing and thawing.</b>

## 1.3. Application

Use DNA Molecular Weight Marker VI as a size standard for DNA in agarose gels.

# 2. How to Use this Product

## 2.1. Before you Begin

### General Considerations

#### Size distribution

Fragment mixture prepared by cleavage of pBR328 DNA with restriction endonuclease Bgl I and pBR328 DNA cleaved with Hinf I. The mixture contains 15 DNA fragments with the following base pair lengths (1 base pair 660 daltons).

**i** Fragment lengths are derived from computer analysis of the pBR328 sequence. The 298, 234, and 154 base pair fragments occur twice.

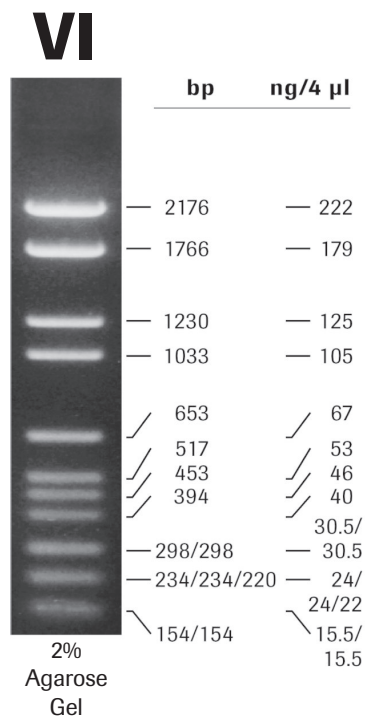
bp											
2,176	1,766	1,230	1,033	653	517	453	394	298	234	220	154

## 3. Results

### Typical analysis

The DNA fragment mixture shows the typical pattern of 11 bands in agarose gel electrophoresis, see Figure 1.

- After gel electrophoresis of 1 µg of the fragment mixture in a 2% Agarose MP\* gel, 11 bands are visible.
- Fragments 298, 234, and 154 occurred twice, resulting in one distinct band.



**Fig. 1:** Separation of 1 µg DNA Molecular Weight Marker VI on a 2% Agarose MP gel, stained with ethidium bromide.

## 4. Supplementary Information

### 4.1. Conventions

To make information consistent and easier to read, the following text conventions and symbols are used in this document to highlight important information:

#### Text convention and symbols

**i** *Information Note: Additional information about the current topic or procedure.*

**⚠ Important Note: Information critical to the success of the current procedure or use of the product.**

① ② ③ etc. Stages in a process that usually occur in the order listed.

1 2 3 etc. Steps in a procedure that must be performed in the order listed.

\* (Asterisk) The Asterisk denotes a product available from Roche Diagnostics.

### 4.2. Changes to previous version

Layout changes.

Editorial changes.

### 4.3. Trademarks

All product names and trademarks are the property of their respective owners.

### 4.4. License Disclaimer

For patent license limitations for individual products please refer to:

**List of biochemical reagent products.**

### 4.5. Regulatory Disclaimer

For life science research only. Not for use in diagnostic procedures.

### 4.6. Safety Data Sheet

Please follow the instructions in the Safety Data Sheet (SDS).

### 4.7. Contact and Support

To ask questions, solve problems, suggest enhancements or report new applications, please visit our **Online Technical Support Site.**

To call, write, fax, or email us, visit **sigma-aldrich.com**, and select your home country. Country-specific contact information will be displayed.

