

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



DNA Molecular Weight Marker VII

 **Version: 21**

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Fragment sizes: 0.081 to 8.576 kbp
SPP1 DNA × Eco RI digested

Cat. No. 11 209 264 001 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 VII	<ul style="list-style-type: none"> Ready-to-use solution in 10 mM Tris-HCl, 1 mM EDTA, pH 8.0, (250 µg/ml). 50 µg corresponds to 1 A₂₆₀ unit. 	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 VII	Store at –15 to –25°C. After thawing, store at +2 to +8°C. ⚠ Avoid repeated freezing and thawing.

1.3. Application

Use DNA Molecular Weight Marker VII 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 SPP1 DNA with restriction endonuclease Eco RI. The mixture contains 17 DNA fragments with the following base pair lengths (1 base pair = 660 daltons).

i Fragment lengths are derived from computer analysis of the SPP1 sequence.

bp
8,576 7,427 6,106 4,899 3,639 2,799 1,953 1,882 1,515 1,482 1,164 992 718 710 492 359 81

3. Results

Typical analysis

The DNA fragment mixture shows the typical pattern of 15 bands in agarose gel electrophoresis, see Figure 1.

- After gel electrophoresis of 1 µg of the fragment mixture in a 1% Agarose MP* gel, 15 bands are visible.
- The 718 bp DNA fragment is not present in stoichiometric amounts due to the circular permutation of the genome. The 718 bp and 710 bp fragments run as one band.
- In agarose gels where the 710 bp and the 718 bp DNA fragment can be resolved, the 718 bp fragment, with approximately 20% the intensity of the 710 bp fragment, can be distinguished.
- The 81 bp DNA fragment is only visible on overloaded gels.

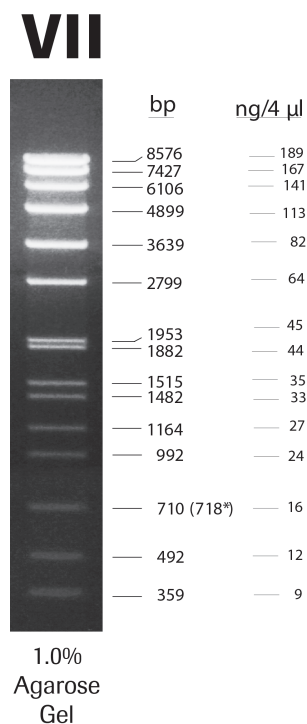


Fig. 1: Separation of 1 µg DNA Molecular Weight Marker VII on a 1% Agarose MP gel, stained with ethidium bromide.

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.

