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

DNA Molecular Weight Marker VIII

Version: 20
Content Version: August 2021

Fragment sizes: 19 to 1,114 bp
pUCBM21 DNA × Hpa II digested
pUCBM21 DNA × Dra I + Hind III digested

Cat. No. 11 336 045 001	50 µg 200 µl 50 gel lanes

Store the product at −15 to −25°C.

1. General Information

1.1. Contents

Vial / bottle	Label	Function / description	Content
1	DNA Molecular Weight Marker VIII, 19 – 1,114 bp	▪ Ready-to-use solution in 10 mM Tris-HCl, 1 mM EDTA, pH 8.0, (250 µg/ml). ▪ 50 µg corresponds to 1 A_{260} 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 VIII, 19 – 1,114 bp	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 VIII 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 pUCBM21 DNA with restriction endonuclease Hpa II and Dra I plus Hind III. The mixture contains 18 DNA fragments with the following base pair lengths (1 base pair = 660 daltons).

i *Fragment lengths are derived from computer analysis of the pUCBM21 sequence. The 34 base pair fragment occur twice.*

bp																
1,114	900	692	501	489	404	320	242	190	147	124	110	67	37	34	26	19

3. Results

Typical analysis

The DNA fragment mixture shows the typical pattern of 13 bands in agarose gel electrophoresis, see Figure 1.

- After gel electrophoresis of 1 µg of the fragment mixture in a 1.8% Agarose MP* gel, 13 bands are visible.
- The 501 bp and 489 bp fragments as well as the fragments 37 to 19 bp run as one band.

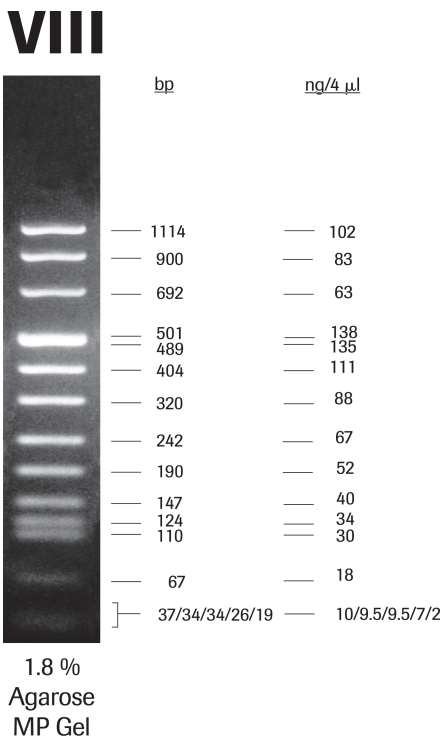

Fig. 1: Separation of 1 µg DNA Molecular Weight Marker VIII on a 1.8% agarose gel, stained with ethidium bromide.

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	
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.
❶ ❷ ❸ 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.

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