## SiZer<sup>™</sup> DNA Markers

### DESCRIPTION

iNtRON supplies a wide range of products for accurate size and mass estimations (quantitation) of nucleic acid fragments. Nucleic Acid Markers are available for sizing linear, or supercoiled DNA and single-stranded RNA fragments. A variety of these markers are available in the ready-to-use SiZer™ formats.

SiZer™ DNA Markers are ideal for determining the size of double-stranded DNA from 60~10,000bp base pairs. The SiZer™ DNA Markers consist of 7 ~ 15linear double-stranded DNA fragments. Several fragments are present at increased intensity to allow easy identification. All fragments are precisely quantified and mixed during the production.

For 5  $\mu$ l loading, all fragments except typical band DNA fragments are 40 ng. The typical band of DNA fragments is 100 ng. These ladders are pre-mixed with loading dye and are ready to use.

All DNA Markers can be stained with RedSafe™ Nucleic Acid Staining Solution, ethidium bromide (EtBr) or other DNA stains.

### **CHARACTERISTICS**

- · Ideal for determining the size of DNA
- Stable for more than 12 months at 20 °C
- Ready to use without any handlings.

### KIT CONTENTS

Product	Contents	Cat. No.
SiZer™-50 plus DNA Marker	0.5ml	24072
SiZer™-100 DNA Marker	0.5ml	24073
SiZer™-100 plus DNA Marker	0.5ml	24078
SiZer™-1000 DNA Marker	0.5ml	24074
SiZer™-1000 Plus DNA Marker	0.5ml	24075

### STORAGE

• Store at 4  $^{\circ}$ C and stable for more than 6 months. For more stable use, should be eliquoted and then stored at-20  $^{\circ}$ C.(stable for more than 12 months.)

### **GENERAL USE**

- No Dnase and Rnase detected.
- Load  $5\mu\ell$  per each well of Agarose gel.

### **QUALITY CONTROL**

Well-defined bands are formed during agarose gel electrophoresis. The DNA concentration is determined spectrophotometrically.

The absence of nucleases is confirmed by a direct nuclease activity assay.

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• The 5  $\mu\ell$  of ladder DNA was loaded, and then electrophoresed for 1hr at appropriate concentration of gel.

#### SiZer™-50 plus SiZer™-100 plus SiZer™-1000 plus SiZer™-100 SiZer™-1000 REF REF REF REF REF bp 24078 24072 24073 24074 10 000 - 6,000 - 5,000 - 4,000 700 600 -2,000 1,500 3.000 400 - 2.000 1.500 1.500 800 700 500 1,000 200 600 **500** 700 150 300 750 - 100 300 200 500 200

### **PRODUCT USE LIMITATION**

This product is developed, designed and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

### **NOTICE BEFORE USE**

- · Do not heat before loading
- For quantification, adjust the concentration of the sample to equalize, it approximately with the amount of DNA in the nearest band of the ladder.
- Visualize DNA by staining RedSafe™, ethidium bromide (EtBr) or other DNA stains.

### **DETAIL INFORMATION**

	Size range (bp)	Conc. (ng/#l)	Typical Bands	Other Bands	Loading Vol.	Band Number	Contents
SiZer™ -50 plus	50-500	128	100ng/5⊯	40ng/5 <i>μ</i> ℓ	5μℓ	13	50,100,150,200, <b>250</b> , 300,400, <u>500</u> ,600, 700,800,900,1000
SiZer™ -100	100-1500	100	100ng/5 <i>ய</i> ி	40ng/5μℓ	5μℓ	11	100,200,300,400, <u>500</u> , 600,700,800, 900,1000,1500
SiZer™ -100 plus	100-3000	100	100ng/5 <i>⊯</i> ℓ	40ng/5 <i>μ</i> ℓ	$5\mu\ell$	13	100,200,300,400, <b>500</b> , 600,700,800,900, 1000,1500,2000,3000
SiZer™ -1000	250-10000	120	100ng/5 <i>⊯</i> ℓ	40ng/5 <i>μ</i> ℓ	5μℓ	12	250,500,750,1000,1500, <b>2000</b> ,3000,4000, <b>5000</b> , 6000,8000,10000
SiZer™ -1000 Plus	100-10000	144	100ng/5 <i>⊯</i> ℓ	40ng/5 <i>µ</i> ℓ	5μℓ	15	100,200,300,400, <b>500</b> , 700,1000,1500,2000, <b>3000</b> ,4000,5000, 6000,8000,10000

### RELATED PRODUCTS

Product Name	Cat.No.
RedSafe <sup>™</sup> Nucleic Acid Staining Solution (20,000x)	21411
DNA-spin <sup>™</sup> Plasmid DNA Extraction Kit	17096 / 17097 / 17098
MEGAquick-spin™ Total Fragment DNA Purification Kit	17286 / 17287 / 17288
Maxime™ PCR PreMix (i-StarTaq)	25165
Maxime <sup>™</sup> PCR PreMix (i-pfu)	25185

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