

# **SiZer TM 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<sup>™</sup> DNA Markers are ideal for determining the size of double-stranded DNA from  $60^{\sim}10,\!000$ bp base pairs. The SiZer<sup>™</sup> DNA Markers consist of 8  $^{\sim}$  15 linear doublestranded 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. 24071	
SiZer™-20 DNA Marker	0.3 ml		
SiZer™-50 plus DNA Marker	0.5 ml	24072	
SiZer™-100 DNA Marker	0.5 ml	24073	
SiZer™-1000 DNA Marker	0.5 ml	24074	
SiZer™-1000 plus DNA Marker	0.5 ml	24075	

# **GENERAL USE**

- No DNase and RNase detected.
- Load 5 µl per each well of Agarose gel.

# 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.

### **STORAGE**

• Store at 4°C and stable for more than 6 months. For more stable use, should be eliquoted and then stored at -20°C. (stable for more than 12 months)

## **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.

#### **ELECTROPHORESIS**

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

## **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<sup>™</sup>, ethidium bromide (EtBr) or other DNA stains.

#### **DETAIL INFORMATION**

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	SiZer™ 20	SiZer™ 50 plus	SiZer™ 100	SiZer™ 1000	SiZer™ 1000plus
Size range	60 - 300 bp	50 - 500 bp	100 -1500 bp	500-10,000bp	100-10,000bp
Conc.	128ng/µl	128ng/µl	100ng/µl	104ng/µl	144ng/µl
Typical bands	100ng/5µl	100ng/5µl	100ng/5µl	100ng/5µl	100ng/5µl
Other bands	40ng/5ul	40ng/5µl	40ng/5µl	40ng/5µl	40ng/5µl
Opt. Gel	5%	3%	1.7%	1%	1%
Loading Vol.	5µl	5µl	5µl	5µI	5µl
Band number	13	13	11	10	15
	60,80 <u>,100</u> ,	50,100,150	100,200,300,	500,1000,1500,	100,200,300
Contents	120,140,160,	200 <u>,250</u> ,300,	400 <u>,<b>500</b></u> ,600,	2000,3000,4000,	400 <u>,<b>500</b></u> ,700
	180, <u>200</u> ,220,	400 <u>,<b>500</b></u> ,600,	700,800,900,	<u>5000</u> ,6000,8000,	1000,1500,2000
	240,260,280,	700,800,900	1000,1500	10000	3000,4000,5000
	300	1000			6000,8000,
					10000

# RELATED PRODUCTS

Product Name	Cat.No.
Agarose	32032
RedSafe™ Nucleic Acid Staining Solution (20,000x)	21411
DNA-spin <sup>™</sup> Plasmid DNA Purification Kit	17093
Maxime™ PCR PreMix (i-StarTaq)	25165
Maxime™ PCR PreMix (i-pfu)	25185



