Product specification		
Product name	Catalog	Specification
1Kb DNA Ladder	DM10020	100µL(40T)
10×DNA Loading Buffer		200µL
1Kb DNA Ladder	DM10040	200µL(100T)
10×DNA Loading Buffer		400µL
1Kb DNA Ladder	DM10100	500µL(100T)
10×DNA Loading Buffer		1000µL

# **1Kb DNA Ladder**

#### **Product introduction**

This product is composed of a specific molecular weight double stranded DNA fragment and has been mixed with loading buffer, which can be used as the DNA molecular weight standard in gel electrophoresis. All the fragments in this product are obtained by the enzyme digestion and purification. Therefore, the belt of the electrophoresis is more clear and dense; The quality between strips is more accurate and true. If the sample size is 5 u L, the DNA fragment of 6000bp and 2000bp are 50ng, and the others are 20ng.

## Method of operation

(1) This product need not to heat, add  $5\mu L$  sample to agarose gel wells directly.

(2) Recommended electrophoresis conditions are 1 x TAE buffer, 0.6-0.8% agarose gel,and 4-10V/cm between the positive and negative electrode.

(3) This product has been added xylenecyanol and bromophenol blue electrophoretic indicator. If 1% agarose gel is used, the position of the xylenecyanol stripe is about 2kb and the position of the bromophenol blue strip is about 400bp.

(4) Using EB or other dye staining after electrophoresis, observed electrophoresis band under the UV lamp.

#### Notes

(1) the quality of electrophoretic images is related to agarose sugar and electrophoresis buffer, using the high quality agarose sugar and replacing electrophoresis buffer frequently can achieve better results.

(2) agarose gel concentration is essential for the separation of DNA bands. Please select the suitable agarose gel for electrophoresis according to the above image.

(3)the equal quality DNA bands after electrophoresis and stained by EB , it is norml that Small molecular weight pigmented light and the stripe is thick. Large molecular weight pigmented dark and the stripe is thin. It is normal that the molecular weight is larger than the depth and the strip is thin.

(4) DNA and the EB stain has the opposite charge, if agarose gel is preloaded with EB during the preparation process. In the electrophoresis, EB will move in the opposite direction of the DNA. After the longstanding electrophoresis, it is normal to see that the small molecular weight fragments appear to be blurry and the bright band is not obvious.

## Storage condition

-20 °C preservation; melted at 4 °C preservation; avoid freezing and thawing repeatedly.

# **Electrophoresis indication zone**



