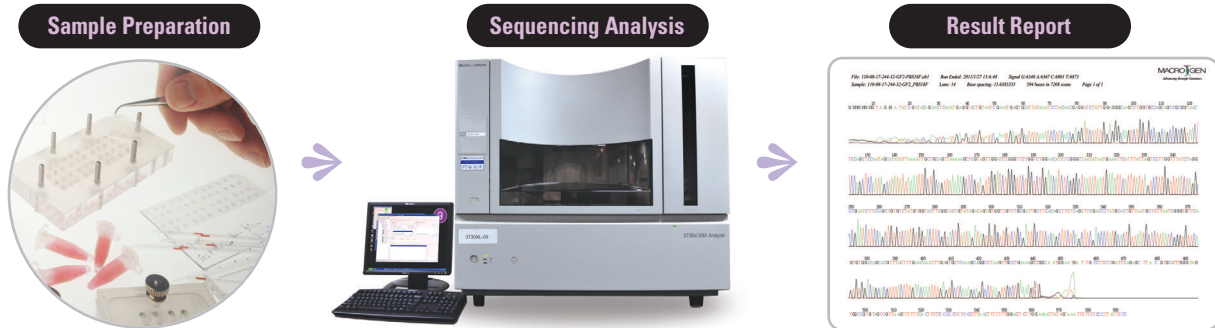


# Normal Automatic Sequencing

## Standard Sequencing



### Description

Macrogen Inc. offers DNA sequencing using state-of-the-art robotics and instrumentation to generate high quality sequence data at affordable prices. We have successfully sequenced countless samples of PCR products, plasmids, and BACs from customers all over the world, and our DNA sequencing services are highly rated for their turnaround time, quality of results, and competitive prices.

### Features

- 3730xl DNA analyzer
- Real time monitoring from registration to result delivery using LIMS (Laboratory Information Management System)
- Result delivery within 24 hours.
- Performing fundamental analysis service at free of charge (Investigating homology for the protein and DNA sequence level through BlastN or BlastX)

### Sample preparation

#### Template

- Plasmid : Concentration 100ng/ $\mu$ l, Volume 20 $\mu$ l
  - PCR product (purified) : Concentration 50ng/ $\mu$ l, Volume 20 $\mu$ l
  - PCR product (non-purified) : Concentration 100ng/ $\mu$ l, Volume 20~30 $\mu$ l
- Example)** In case of 300bp of PCR product, if you send 30ng/ $\mu$ l of a sample then better results are obtained(100bp $\approx$ 10ng/ $\mu$ l). It is recommended to check the PCR product concentration through electrophoresis rather than Nano-drop.

#### Primer

- Concentration : 5 pmole/ $\mu$ l (5pM), Volume : 20 $\mu$ l
- Example)** For 5 Reactions: 20 $\mu$ l, as the reaction number increases increment 2 $\mu$ l each.
- Please separate template and primer when you send primers.
  - Primer Tm : 55~60°C, GC content : 40%~60%.

### Order & Result

- Based on normal plasmid template basis, guarantee phred score more than 20, read-length more than 650 bp



# Plate Sequencing

## Description

For the customers with large number of samples processed in 96-well plates, this will be a better option. "Plate Sequencing" refers to the orders charged per one entire 96-well plate. Samples can be sent as clones, un-purified PCR products and purified DNA. Plasmid DNA preparation and PCR clean-up is included in the plate sequencing service.

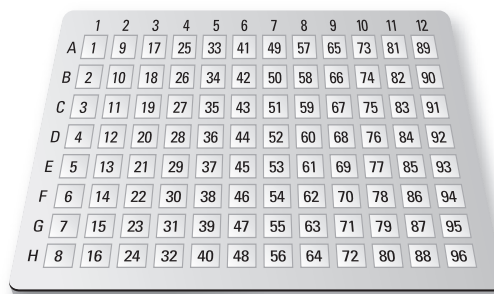
## Benefits

- Low Cost & Best Price
- Easy order system
- High Quality Service
- Quick Turnaround
- Shipping Free

## Sample preparation

### 96 Well Plate:

- Please number your samples as shown the well box (top to bottom, left to right, A1 to H12):



## Service Type

### ❖ 1primer / 1plate

- One single primer should be applied to the whole plate, so that we can simply put the primers to the corresponding sample plate.
- We will provide the results as the following file name.

[Plate\_name]-[Well\_position]\_[Primer\_name].ab1

### ❖ 2primer / 1plate

- Only two custom primers (or two universal primers) in tubes could be acceptable for applying this Plate sequencing.
- \*Note : For three or more primers, your order will be regarded as Single sequencing reactions

### ❖ Multiple Primers / 1plate

- "Multiple Primers / 1 Plate can be applicable in case you send primers in the plate which has same well position information with the sample plate regardless of primer's quantity.
- \*Note : Each paired primer should be filled in the 96-well plate which has same well position with the paired sample plate

## Value Service

- Data registration and the process can be monitored in real time. For customer's convenience, the result can be delivered as downloadable file (ab1, txt, pdf, phd format) through your LIMS and e-mail.
- Also, Macrogen lifetime storage service will be stored all of your result files (ab1 format) free of charge up to fifteen (15) years from the date of data creation.
- All process from registration to result sending can be done via on-line sequencing system (<http://dna.macrogen.com>).

