



Selection Guide

- Magnetic Bead Prep Kit

"Beyond the PCR technology, BIOFACT promises the progress for your research. BIOFACT provides you the most innovative high-quality reagents and lab supplies which lead to success of your tomorrow."

Magnetic Bead

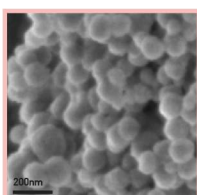
Superparamagnetic Nanoparticle

Magnetic bead synthesized by BIOFACT technology

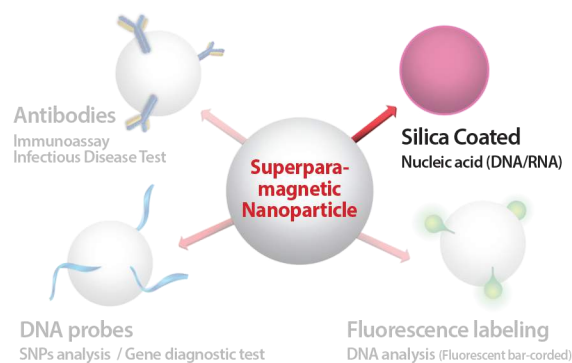
Magnetic bead is a small bead (nanoparticle) particle which has an optimized silica-like surface chemistry and a high specific surface area, providing efficient kinetics and a high sensitivity in nucleic acid capture. It can be used in a variety of bio-technology applications such as DNA/RNA/Protein extraction due to its superior binding and dissociation features through magnetic property.

Features of HiGene™ Magnetic Bead

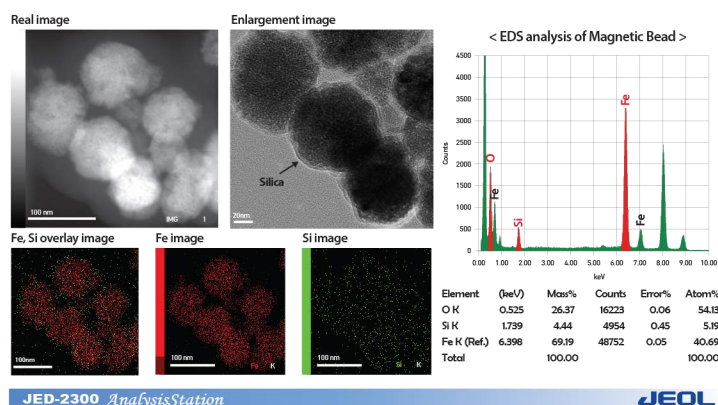
- ✓ Uniformity of magnetic nanoparticles size
- ✓ Minimization of aggregation reaction
- ✓ Prevention of prevents iron toxicity
- ✓ Three bead sizes for various applications (Ø 110 nm, Ø 120 nm, Ø 200 nm)



Typical SEM images of silica coated superparamagnetic nanoparticles



< Typical SEM, TEM images of silica coated superparamagnetic nanoparticles >



▶▶ HiGene™ Magnetic Bead (I / II)



Magnetic Separation Stand

Magnetic Separation Stand

Any scale of extraction available in one stand (Mini, Midi and Maxi scale)

Hisol™ Magnetic Separation Stand
(1.5 ml / 2.0 ml × 12 hole, 50 ml × 2 hole)
[SJ1-MSS01]



- Extraction of up to 12 samples at once (1.5ml / 2.0ml)
- Stand for 1.5ml / 2.0ml / 50ml tubes
- Perfect compatibility for every 1.5ml / 2.0ml tube

Hisol™ Magnetic Separation Stand
(1.5 ml / 2.0 ml × 2 hole)
[SJ1-MSS03]



- Perfect compatibility for every 1.5ml / 2.0ml tube
- Attachable between stands

Hisol™ Magnetic Separation Stand
(96 well) [SJ1-MSS96]



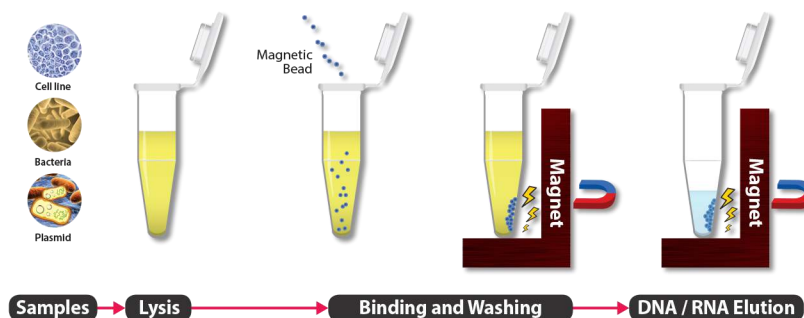
- A large number of samples extraction at once
- Perfect compatibility for 96 well plates & 8 strip tubes

Magnetic Bead Prep Kit

HiGene™ Magnetic Bead Prep Kit

- ✓ Superior binding capacity
- ✓ Any scale of extraction available
- ✓ High Yield isolation
- ✓ No equipment required (e.g. centrifuge and etc..)
- ✓ Easy to use even for unskilled user
- ✓ Competitive price

▶▶ Preparation step using magnetic bead



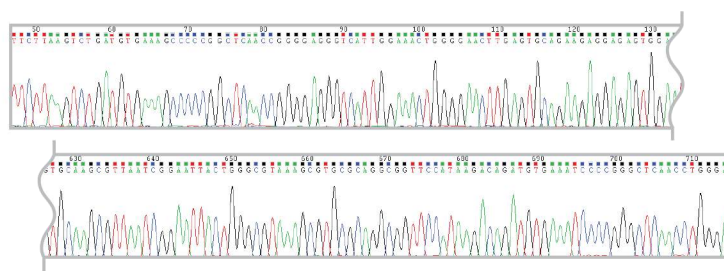
Plasmid Extraction

Any scale of extraction available in one kit

HiGene™ Plasmid Prep Kit [Magnetic Bead Type] [PM751-200]



▶▶ Amount of buffer adjustable (Mini / Midi / Maxi)



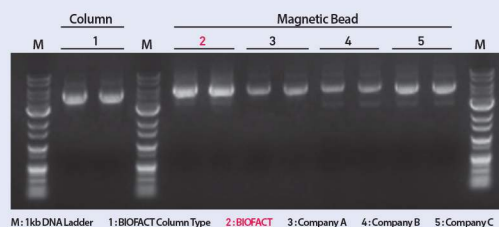
Highly accurate and reliable DNA sequence data can be obtained using HiGene™ Plasmid Prep Kit [Magnetic Bead Type]

Mini scale (200 preps), midi scale (20 preps) and maxi scale (10 preps) prep can be available in one kit (HiGene™ Plasmid Prep Kit).

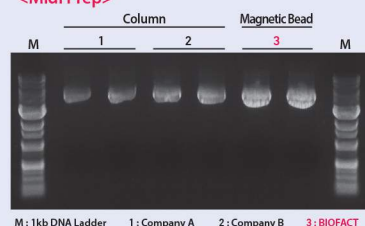
QC data

▶▶ Comparison data of extraction efficiency

<Mini Prep>



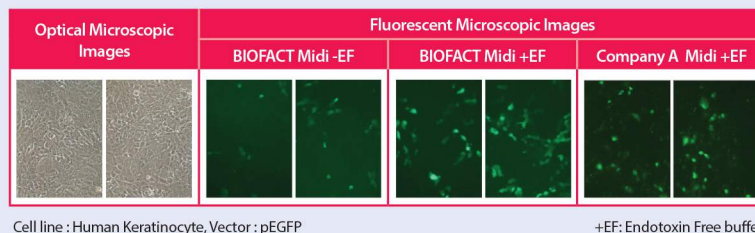
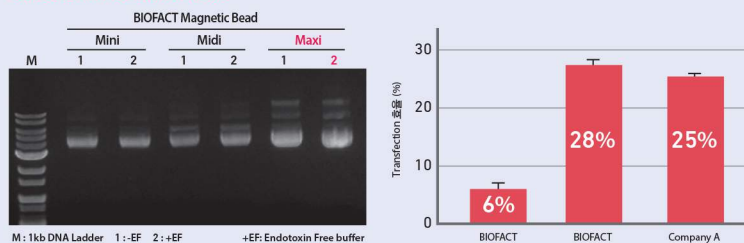
<Midi Prep>



※ Total elution volume: mini (100μl), midi (1ml) and maxi (2ml) 1% agarose gel, 2μl loading

▶▶ Comparison data of extraction efficiency using Endotoxin Free buffer

<Endotoxin Free buffer test>



Cell line : Human Keratinocyte, Vector : pEGFP

+EF: Endotoxin Free buffer

BIOFACT Magnetic Bead Prep Kit

Selection Guide

Magnetic Bead Prep Kit

Genomic DNA Extraction / Total RNA Extraction

High yield gDNA / Total RNA isolation

HiGene™ Genomic DNA Prep Kit [Magnetic Bead] [GD701-100]



- Bacterium, Cultured cell [GD701-100]
- Blood [GD702-100]
- Plant [GD703-100]
- Animal Tissue [GD704-100]
- Saliva, Oral Epithelial Cell [GD705-100]

Total RNA Prep Kit [Launching Soon]

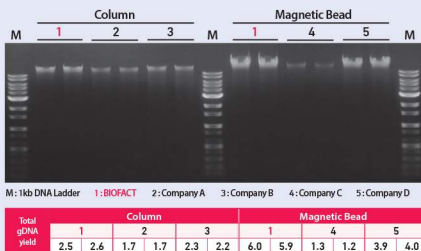


QC data

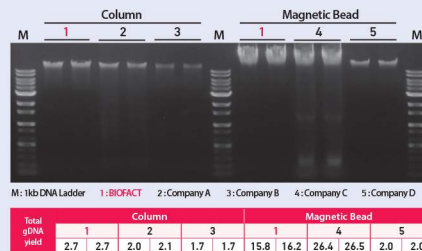
Comparison data of extraction efficiency from various samples

▶▶ Bacterium, Cultured cell

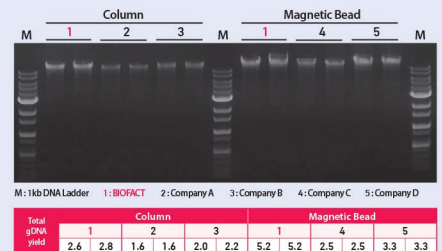
<Microorganism : Gram+ (Bacillus)>



<Microorganism : Gram- (E.coli)>



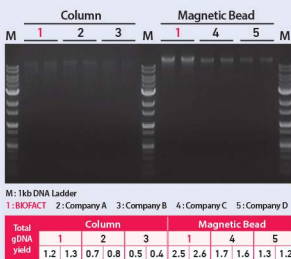
<Human : HEK293 Cultured Cell>



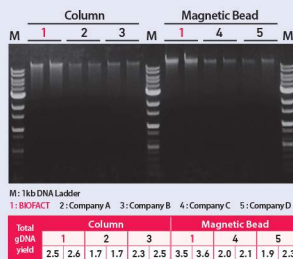
※ In case of company C, gDNA yield is increased as RNA is extracted together.

▶▶ Animal Tissue

<Pork - 10 mg>

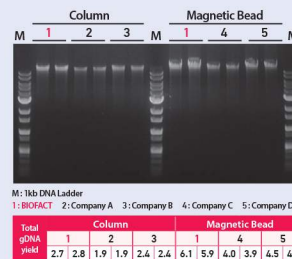


<Pork - 40 mg>



▶▶ Blood

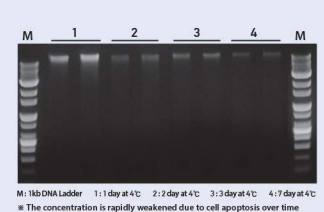
<200 µl>



▶▶ Saliva, Oral Epithelial Cell

*According to various storage periods

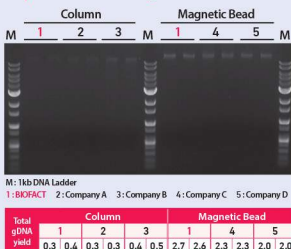
<Saliva - 500 µl>



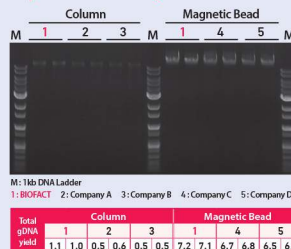
※ The concentration is rapidly weakened due to cell apoptosis over time

▶▶ Plant

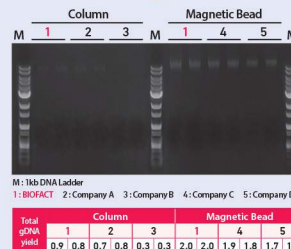
<Spinach leaf - 20 mg>



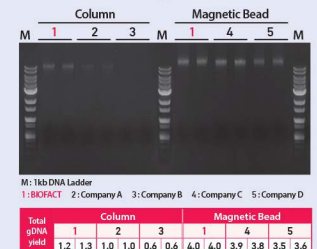
<Spinach leaf - 50 mg>



<Radish seed - 20 mg>



<Radish seed - 50 mg>



※ Total elution volume: 100 µl, 1% agarose gel and 2 µl loading

BIOFACT Magnetic Bead Prep Kit

Selection Guide

Magnetic Bead Prep Kit

DNA fragment Purification



Perfect pre-step for sequencing / cloning step

HiGene™ PCR Purification Kit [Magnetic Bead Type] [PP755-200]

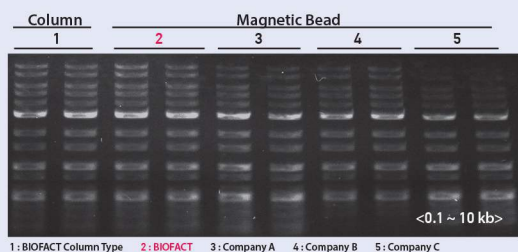
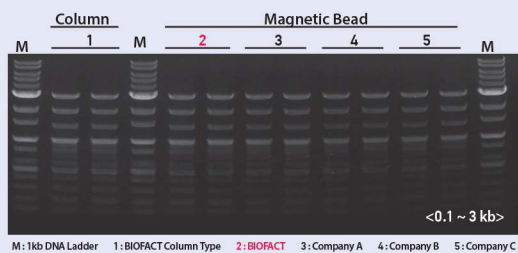


HiGene™ Gel Extraction Kit [Magnetic Bead Type] [GP756-200]

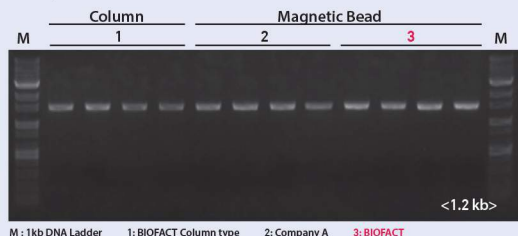


QC data

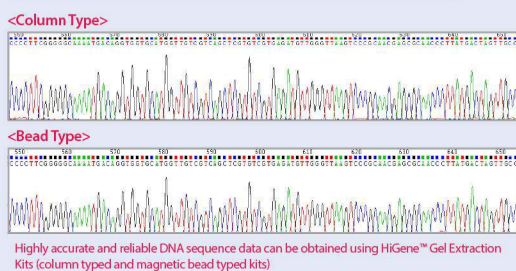
▶▶ Comparison data of PCR purification efficiency



▶▶ Comparison of gel extraction efficiency between two purification methods



Comparison of sequencing data on various gel extraction methods



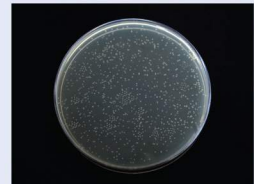
▶▶ Comparison of cloning efficiency between two purification methods

Check whether target DNA is properly inserted or not with PCR products which are purified through two PCR purification methods

<Column Type>



<Bead Type>



Cloning PCR Data

<Column Type>



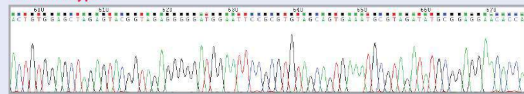
<Bead Type>



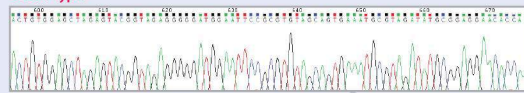
It has been showed insertion rate of target insert DNA is similar between two methods

Comparison of sequencing data on various PCR purification methods

<Column Type>



<Bead Type>



Highly accurate and reliable DNA sequence data can be obtained using HiGene™ PCR Purification Kits (column typed and magnetic bead typed kits)

BIOFACT Magnetic Bead Prep Kit

Selection Guide

⦿ Magnetic Bead

VAT 별도

Cat.No.	Product	Size
MB769-50h	HiGene™ Magnetic Bead I (Ø 110nm)	5 mL
MB769-25k	HiGene™ Magnetic Bead I (Ø 110nm)	25 mL
MB769-100k	HiGene™ Magnetic Bead I (Ø 110nm)	100 mL
MB769-500k	HiGene™ Magnetic Bead I (Ø 110nm)	500 mL
MB739-50h	HiGene™ Magnetic Bead II (Ø 120nm)	5 mL
MB739-25k	HiGene™ Magnetic Bead II (Ø 120nm)	25 mL
MB739-100k	HiGene™ Magnetic Bead II (Ø 120nm)	100 mL
MB739-500k	HiGene™ Magnetic Bead II (Ø 120nm)	500 mL

⦿ Plasmid DNA Extraction (Mini, Midi and Maxi scale available)

Cat.No.	Product	Size
PM751-200	HiGene™ Plasmid Prep Kit [Magnetic Bead Type]	200 prep
PM751-500	HiGene™ Plasmid Prep Kit [Magnetic Bead Type]	500 prep

※ 200 prep (Mini) 20 prep (Midi) 10 prep (Maxi)

※ 500 prep (Mini) 50 prep (Midi) 25 prep (Maxi)

⦿ Total RNA Extraction

Cat.No.	Product	Size
Launching soon	HiGene™ Total RNA Prep Kit [Magnetic Bead Type]	-
Launching soon	HiGene™ Total RNA Prep Kit [Magnetic Bead Type]	-

⦿ Genomic DNA Extraction

Cat.No.	Product	Size
GD701-100	HiGene™ Genomic DNA Prep Kit For Bacterium, Cultured cell [Magnetic Bead Type]	100 prep
GD701-200	HiGene™ Genomic DNA Prep Kit For Bacterium, Cultured cell [Magnetic Bead Type]	200 prep
GD702-100	HiGene™ Genomic DNA Prep Kit For Blood [Magnetic Bead Type]	100 prep
GD702-200	HiGene™ Genomic DNA Prep Kit For Blood [Magnetic Bead Type]	200 prep
Launching soon	HiGene™ Genomic DNA Prep Kit For Plant [Magnetic Bead Type]	100 prep
Launching soon	HiGene™ Genomic DNA Prep Kit For Plant [Magnetic Bead Type]	200 prep
GD704-100	HiGene™ Genomic DNA Prep Kit For Animal Tissue [Magnetic Bead Type]	100 prep
GD704-200	HiGene™ Genomic DNA Prep Kit For Animal Tissue [Magnetic Bead Type]	200 prep
Launching soon	HiGene™ Genomic DNA Prep Kit For Saliva, Oral Epithelial Cell [Magnetic Bead Type]	100 prep
Launching soon	HiGene™ Genomic DNA Prep Kit For Saliva, Oral Epithelial Cell [Magnetic Bead Type]	200 prep

⦿ DNA Fragment Purification

Cat.No.	Product	Size
PP755-200	HiGene™ PCR Purification Kit [Magnetic Bead Type]	200 prep
PP755-500	HiGene™ PCR Purification Kit [Magnetic Bead Type]	500 prep
GP756-200	HiGene™ Gel Extraction Kit [Magnetic Bead Type]	200 prep
GP756-500	HiGene™ Gel Extraction Kit [Magnetic Bead Type]	500 prep

⦿ Magnetic Separation Stand

Cat.No.	Product	Size
SJ1-MSS01	Hisol™ Magnetic Separation Stand, 1.5 mL / 2.0 mL × 12 hole, 50 mL × 2 hole	EA
SJ1-MSS03	Hisol™ Magnetic Separation Stand, 1.5 mL / 2.0 mL × 2 hole	EA
SJ1-MSS96	Hisol™ Magnetic Separation Stand, 96 well type	EA



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