# MP Biomedicals
# MagBeads FastDNA® Kit for Feces

## Promotion for Newly Launched Product


MagBeads FastDNA® Kit for Feces

MP Magnetic Rack 8

MP Magnetic Rack 24


1. **Super discount and free trial!**
2. **Validity**
   **2020.1.1-2020.12.31**
3. **Fill up the feedback form and receive a complimentary gift!**

## Ordering Information

| Product | Packaging | Cat. No. |
|---|---|---|
| MagBeads FastDNA® Kit for Feces | 50 preps | 116570400 |
| MagBeads FastDNA® Kit for Feces Sample | 5 preps | 116570401 |
| MP Magnetic Rack 24 | 1 ea | 116570413 |
| MP Magnetic Rack 8 | 1 ea | 116570426 |
| MagBeads FastDNA® Kit for Feces | Custom Made | |


# MP Biomedicals
# MagBeads FastDNA® Kit for Feces



## Magnetic Beads for Quick Isolation of Genomic DNA from Feces Sample

**Manual & Automatic Extraction**


**MP Bio Americas**
custserv@mpbio.com
1.800.854.0530

**MP Bio Europe**
custserv.eur@mpbio.com
00800.7777.9999

**MP Bio APAC**
asia.custserv@mpbio.com
65.6775.0008

www.mpbio.com

## Extraction Kit Introduction

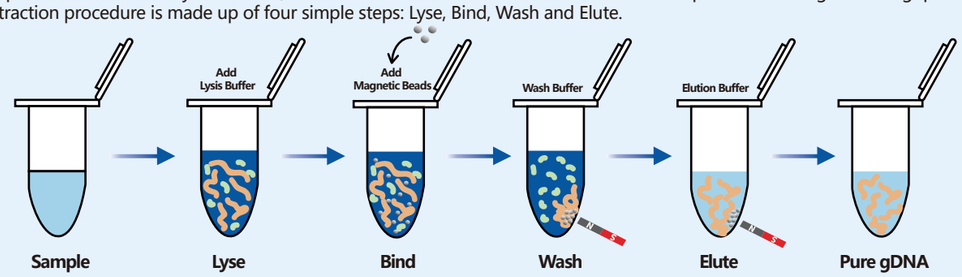
MagBeads FastDNA® Kit for Feces enables quick isolation of gDNA from fecal sample. The kit is equipped with specially formulated buffers to effectively remove various contaminants such as proteins, humic substances, polyphenols, polysaccharides etc. It also has proprietary magnetic beads with high binding capacity and selectivity for gDNA. As such, high yields of pure gDNA can be extracted and ready for downstream analyses like PCR, restriction digestion, sequencing and others. Manual extraction is performed with the use of Magnetic Rack, or the kit is also compatible with most of the automated nucleic acid extraction instruments on the market. The high throughput of this kit is a perfect way to increase work efficiency.

## Product Highlights

- ✓ **Extracted DNA of High Quality:** Intact, high yield and free from inhibitors;
- ✓ **Simple and Quick Protocol:** Extraction process within 1 hour, even higher throughput with automated instrument;
- ✓ **Wide Application:** Extraction from human and animal feces, as well as intestinal contents;
- ✓ **Environmentally Friendly:** No phenol/chloroform or other toxic chemicals.

## Extraction Protocol with MagBeads

Extraction can be done manually using a MP Magnetic Rack-24 (Cat. No. 116570413), which allows a maximum of 24 sample to be process simultaneously. Otherwise, automated nucleic acid extraction instrument can provide even higher throughput. The extraction procedure is made up of four simple steps: Lyse, Bind, Wash and Elute.




## Data: gDNA Yield and Purity

| Feces Origin | Extraction Mode | Yield (ng/mg) | 260/280 | 260/230 |
|---|---|---|---|---|
| Swine | Manual | 126.68 ± 1.45 | 1.99 ± 0.01 | 2.02 ± 0.02 |
| | Automation | 106.98 ± 3.23 | 1.94 ± 0.00 | 1.93 ± 0.05 |
| Mouse | Manual | 110.33 ± 1.80 | 1.97 ± 0.00 | 1.25 ± 0.23 |
| | Automation | 99.33 ± 3.81 | 1.96 ± 0.01 | 2.40 ± 0.13 |
| Human | Manual | 107.30 ± 5.59 | 1.97 ± 0.01 | 1.24 ± 0.12 |
| | Automation | 110.32 ± 1.15 | 2.00 ± 0.01 | 1.71 ± 0.03 |
| Chicken | Manual | 85.38 ± 15.24 | 1.90 ± 0.01 | 1.12 ± 0.14 |
| | Automation | 52.17 ± 7.34 | 1.90 ± 0.02 | 1.48 ± 0.09 |
| Bovine | Manual | 77.60 ± 2.31 | 1.80 ± 0.01 | 0.98 ± 0.02 |
| | Automation | 53.82 ± 2.17 | 1.72 ± 0.01 | 1.07 ± 0.04 |
| Elephant | Manual | 31.98 ± 1.64 | 1.84 ± 0.01 | 1.01 ± 0.16 |
| | Automation | 22.18 ± 0.21 | 1.81 ± 0.00 | 1.46 ± 0.02 |

MagBeads FastDNA® Kit for Feces is able to extract high yield of pure gDNA from various feces sample.

Remark: Yield difference between manual and automatic mode is due to variation in sample processing volume.

## Performance of MagBeads FastDNA® Kit for Feces

### 1 Electrophoretic Analysis

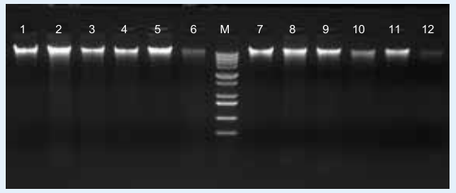



Figure 1: gDNA extracted from different feces sample using MagBeads FastDNA® Kit for Feces.
Lane 1-6: Manual extraction Lane 7-12: Automation extraction M: 1kb plus DNA ladder
Lane 1&7: 30 mg swine feces Lane 2&8: mouse feces Lane 3&9: 30 mg human feces
Lane 4&10: 150 mg chicken feces Lane 5&11: 150 mg bovine feces Lane 6&12: 150 mg elephant feces

**Extracted gDNA is intact and showing single bright band.**

### 2 16S rDNA PCR

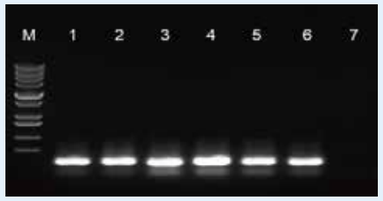



Figure 2: PCR of gDNA extracted from different feces sample using MagBeads FastDNA® Kit for Feces.
M: 1kb plus DNA ladder Lane 1: swine feces Lane 2: mouse feces Lane 3: human feces
Lane 4: chicken feces Lane 5: bovine feces Lane 6: elephant feces Lane 7: negative control

**Extracted gDNA is free from inhibitors and ready for PCR amplification.**

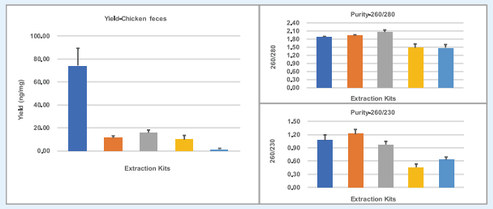
### 3 HindIII Restriciton Enzyme Digestion


Figure 3: Restriction digestion of gDNA extraction from different feces sample .
Lane 1&2: Swine Lane 3&4: Swine Lane 5&6: Human
Lane 7&8: Chicken Lane 9&10: Bovine Lane 11&12: Elephant
1/3/5/7/9/11: Before digestion 2/4/6/8/10/12: Afer digestion M: 1kb plus DNA ladder

**Extracted gDNA is free from inhibitors and ready for restriction enzyme digestion.**

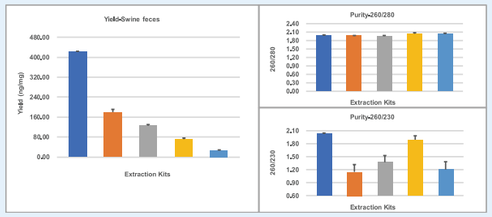
## Comparison with Competitor Kit

### 1 Competitor Kit on Chicken Feces gDNA Extraction



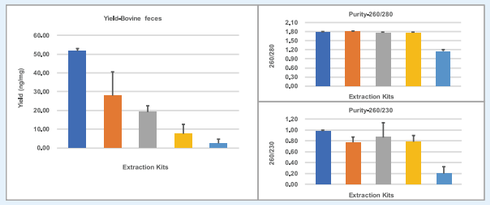

MP MagBeads Feces Kit T Kit Q Kit 1 O Kit Q Kit 2

### 2 Competitor Kit on Swine Feces gDNA Extraction




MP MagBeads Feces Kit T Kit Q Kit 1 O Kit Q Kit 2

### 3 Competitor Kit on Bovine Feces gDNA Extraction




MP MagBeads Feces Kit T Kit Q Kit 1 O Kit Q Kit 2

**MagBeads FastDNA® Kit for Feces has outcompeted competitor kits by demonstrating higher yield and purity.**