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Barcoding PCR for MiSeq sequencing

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Protocol status: Working
We use this protocol and it's
working

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Abstract

Barcoding PCR for MiSeq sequencing

Barcode head 8mer-GCT ATG CGC GAG CTG C Modified from Rudi et al. (2003)



PCR mixture

1

| Reagent | Final. conc. | 1 tube (50µl) | 1 tube(25µ l) | 96 tubes (50µl x100) |
|----------------------------|--------------|---------------|------------------|-------------------------|
| PCR H ₂ O | | 36.15 | 18.075 | 3615 |
| 10X DreamTaq Green Buffer | 1x | 5 | 2.5 | 500 |
| dNTP mixture (2.0 mM each) | 0.2mM | 5 | 2.5 | 500 |
| MgCl ₂ (25 mM) | 2mM | 0* | 0 | 0 |
| BSA (20 μg/μl) | 0.08 μg/μl | 0.2 | 0.1 | 20 |
| Barcode (50 µM) | 0.4 μΜ | 0.4 | 0.2 | 0.4 x 100 |
| Dream Taq green (5U/µl) | 1.25 U/50µl | 0.25 | 0.125 | 25 |
| Template | | 3 | 1.5 | 3 x 100 |
| Final volume | | 50 | 25 | 5000 |

^{*} Buffer already contains ${\rm MgCl}_2$ at a final conc. of 2.0 mM.

PCR program

```
2
     1. 94°C - 4'
     2. x4-9{
         a. 52°C - 30"
         b. 72°C - 45"
         c. 94°C - 30"
     3. 52°C - 30"
     4. 72°C - 10'
```