

# **What the Taq? The Influence of Different Hi-Fidelity Taq Polymerase on 16S rRNA Sequencing**

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Supplemental

**Table S1: ANOVA Results of Number of OTUs Differences between HiFi Taq in Fecal Samples**

| DF | Sum Squares | Mean Squares | F value | P-value | BH      | Cycle | Sub-Sample Depth |
|----|-------------|--------------|---------|---------|---------|-------|------------------|
| 4  | 3.66        | 0.91         | 1.25    | 3.5e-01 | 3.5e-01 | 20x   | 1000             |
| 4  | 6.90        | 1.73         | 2.84    | 6.1e-02 | 1.2e-01 | 25x   | 1000             |
| 3  | 4.67        | 1.56         | 2.55    | 1.0e-01 | 1.4e-01 | 30x   | 1000             |
| 4  | 13.01       | 3.25         | 16.35   | 2.4e-05 | 9.7e-05 | 35x   | 1000             |
| 4  | 5.15        | 1.29         | 4.57    | 1.2e-01 | 1.2e-01 | 20x   | 5000             |
| 4  | 8.11        | 2.03         | 4.98    | 1.3e-02 | 1.8e-02 | 25x   | 5000             |
| 3  | 10.36       | 3.45         | 25.24   | 1.8e-05 | 3.6e-05 | 30x   | 5000             |
| 4  | 14.38       | 3.59         | 81.00   | 1.6e-09 | 6.4e-09 | 35x   | 5000             |
| 2  | 2.85        | 1.43         | 3.73    | 1.5e-01 | 1.5e-01 | 20x   | 10000            |
| 4  | 10.39       | 2.60         | 11.92   | 3.8e-04 | 5.1e-04 | 25x   | 10000            |
| 3  | 11.22       | 3.74         | 57.90   | 2.1e-07 | 4.2e-07 | 30x   | 10000            |
| 4  | 13.25       | 3.31         | 57.20   | 4.0e-08 | 1.6e-07 | 35x   | 10000            |
| 2  | 0.27        | 0.13         | 0.10    | 9.1e-01 | 9.1e-01 | 20x   | 15000            |
| 4  | 8.69        | 2.17         | 7.23    | 4.1e-03 | 5.5e-03 | 25x   | 15000            |
| 3  | 10.40       | 3.47         | 25.95   | 1.6e-05 | 3.1e-05 | 30x   | 15000            |
| 4  | 12.24       | 3.06         | 48.03   | 2.7e-07 | 1.1e-06 | 35x   | 15000            |
| 1  | 1.00        | 1.00         | NA      | NA      | NA      | 20x   | 20000            |
| 4  | 9.84        | 2.46         | 12.50   | 4.5e-04 | 4.5e-04 | 25x   | 20000            |
| 3  | 10.65       | 3.55         | 31.67   | 5.5e-06 | 8.3e-06 | 30x   | 20000            |
| 3  | 11.61       | 3.87         | 119.82  | 3.3e-09 | 9.9e-09 | 35x   | 20000            |

**Table S2: Tukey Post-Hoc Results of Number of OTUs Differences between HiFi Taq in Fecal Samples**

| Difference | Lower | Upper  | P Adjusted | Comparison | Cycle | Sub-Sample Depth |
|------------|-------|--------|------------|------------|-------|------------------|
| 299.50     | 88.49 | 510.51 | 5.7e-03    | PL-ACC     | 35x   | 20000            |
| 192.50     | 53.41 | 331.59 | 5.8e-03    | PL-ACC     | 35x   | 10000            |
| 251.75     | 52.99 | 450.51 | 1.2e-02    | PL-ACC     | 35x   | 15000            |
| 119.92     | 14.60 | 225.23 | 2.3e-02    | PL-K       | 35x   | 5000             |
| 155.50     | 16.41 | 294.59 | 2.6e-02    | PL-PHU     | 35x   | 10000            |
| 108.00     | 10.50 | 205.50 | 2.7e-02    | PL-ACC     | 35x   | 5000             |
| 235.75     | 24.74 | 446.76 | 2.7e-02    | PL-PHU     | 35x   | 20000            |
| 187.00     | 16.65 | 357.35 | 2.9e-02    | PL-K       | 35x   | 10000            |

**Table S3: ANOVA Results of Number of OTUs Differences between HiFi Taq in Mock Samples**

| DF | Sum Squares | Mean Squares | F value | P-value | BH      | Cycle | Sub-Sample Depth |
|----|-------------|--------------|---------|---------|---------|-------|------------------|
| 2  | 364.56      | 182.28       | 15.82   | 1.7e-03 | 2.2e-03 | 20x   | 1000             |
| 4  | 3478.53     | 869.63       | 75.15   | 2.7e-09 | 1.1e-08 | 25x   | 1000             |
| 4  | 2206.58     | 551.64       | 10.28   | 1.8e-05 | 3.6e-05 | 30x   | 1000             |
| 4  | 1971.92     | 492.98       | 2.31    | 1.0e-01 | 1.0e-01 | 35x   | 1000             |
| 3  | 267.19      | 89.06        | 9.44    | 1.8e-03 | 2.0e-03 | 25x   | 5000             |
| 3  | 7731.36     | 2577.12      | 80.88   | 1.1e-12 | 3.3e-12 | 30x   | 5000             |
| 3  | 13086.29    | 4362.10      | 8.67    | 2.0e-03 | 2.0e-03 | 35x   | 5000             |
| 3  | 400.50      | 133.50       | 7.14    | 5.2e-03 | 5.2e-03 | 25x   | 10000            |
| 3  | 18644.56    | 6214.85      | 115.99  | 5.0e-14 | 1.5e-13 | 30x   | 10000            |
| 3  | 50519.50    | 16839.83     | 435.98  | 1.6e-12 | 2.5e-12 | 35x   | 10000            |

**Table S4:**

**Table S5:**

**Table S6:**

**Table S7:**