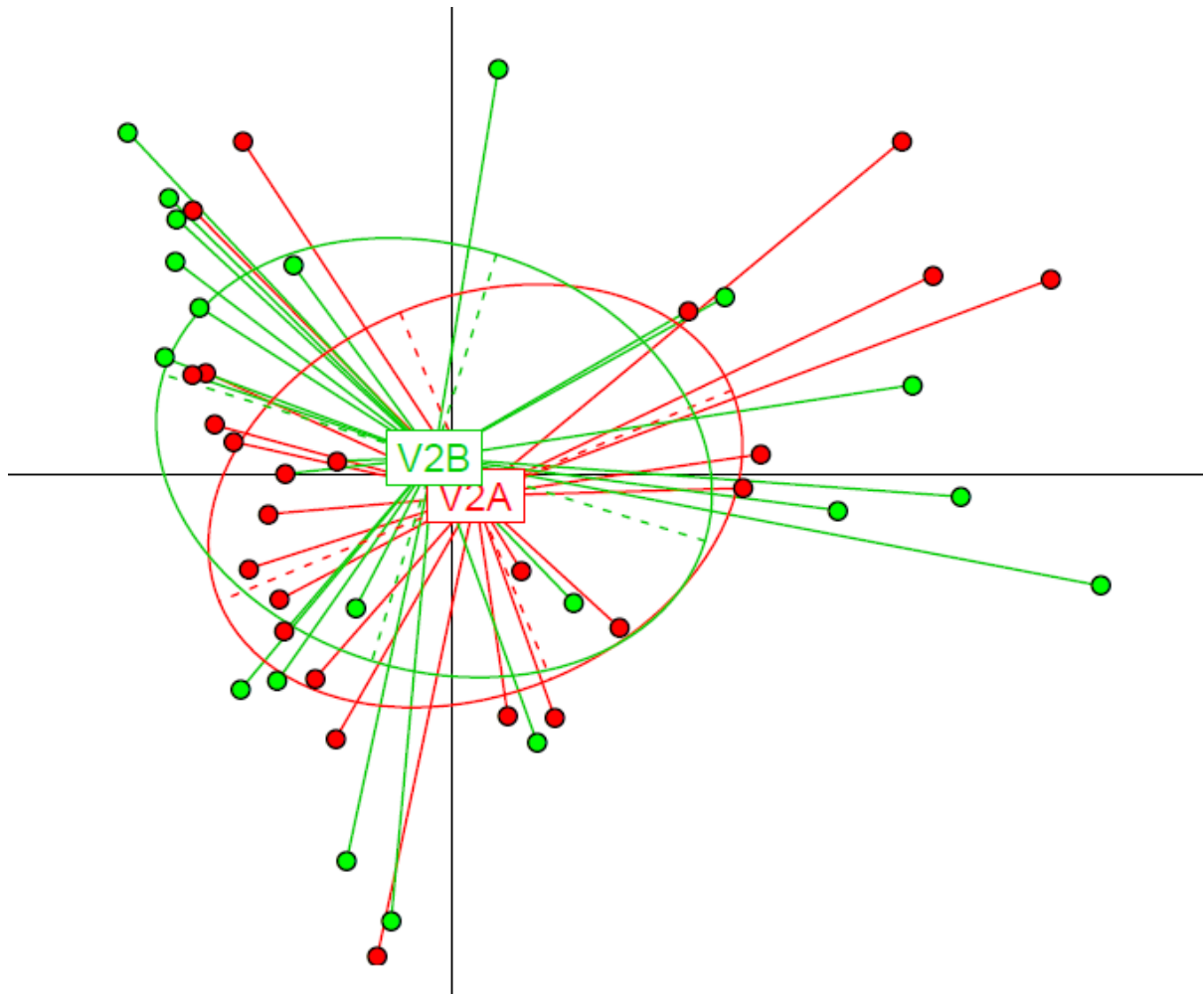
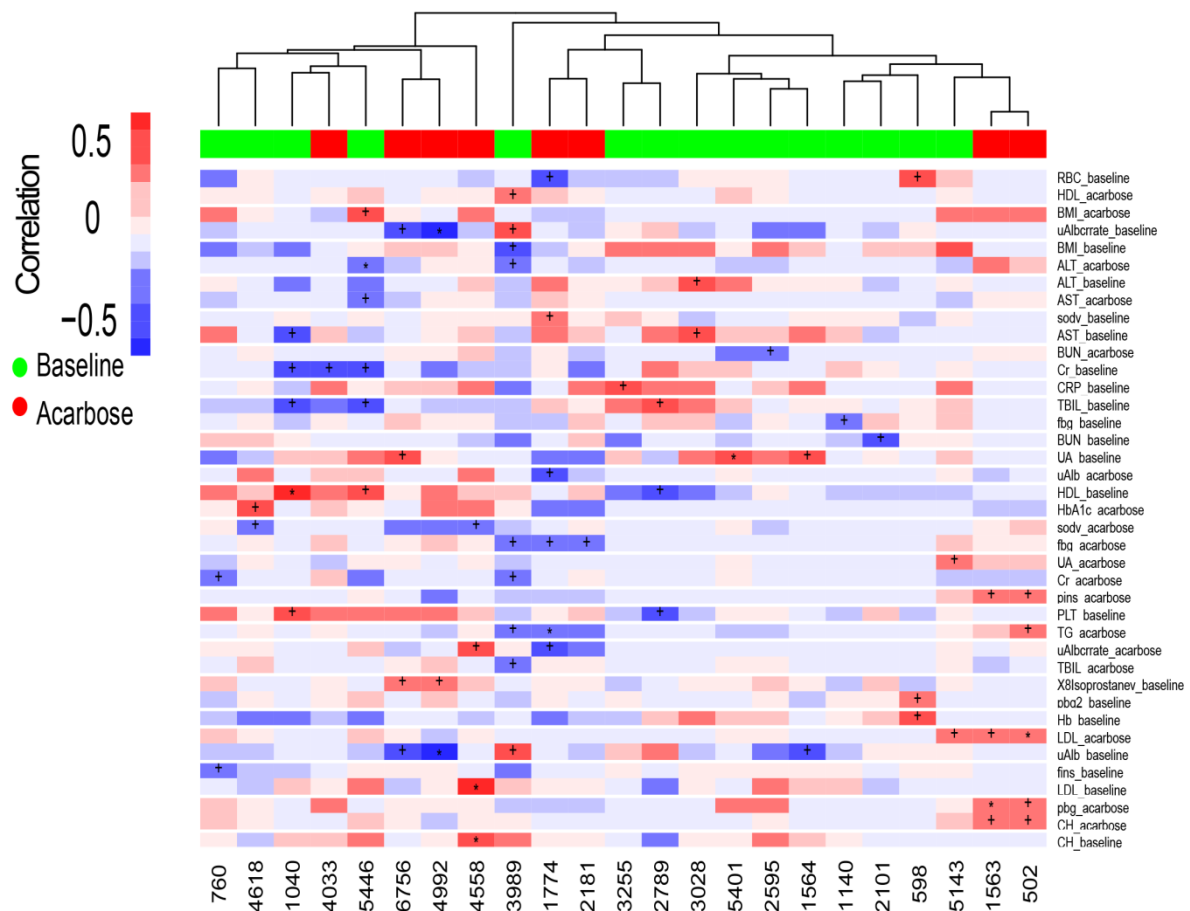


## SUUPLEMENTARY MATERIAL

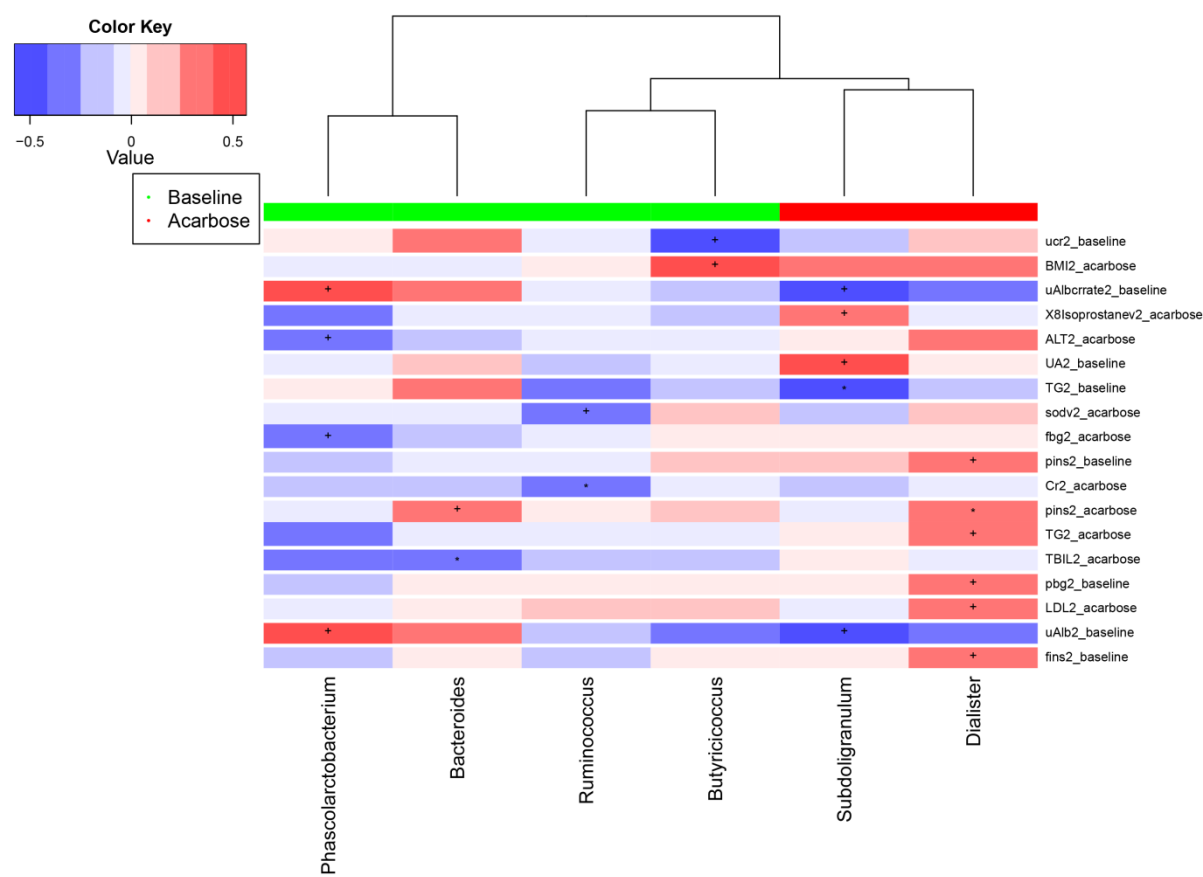
**Figure S1.** No significant difference was found in gut flora between two groups (V2A and V2B respectively represent the subjects randomized to placebo and acarbose group) at the baseline of stage 1. The genera profiles were normalized, and PCA was conducted to compare the microbiota in these samples.



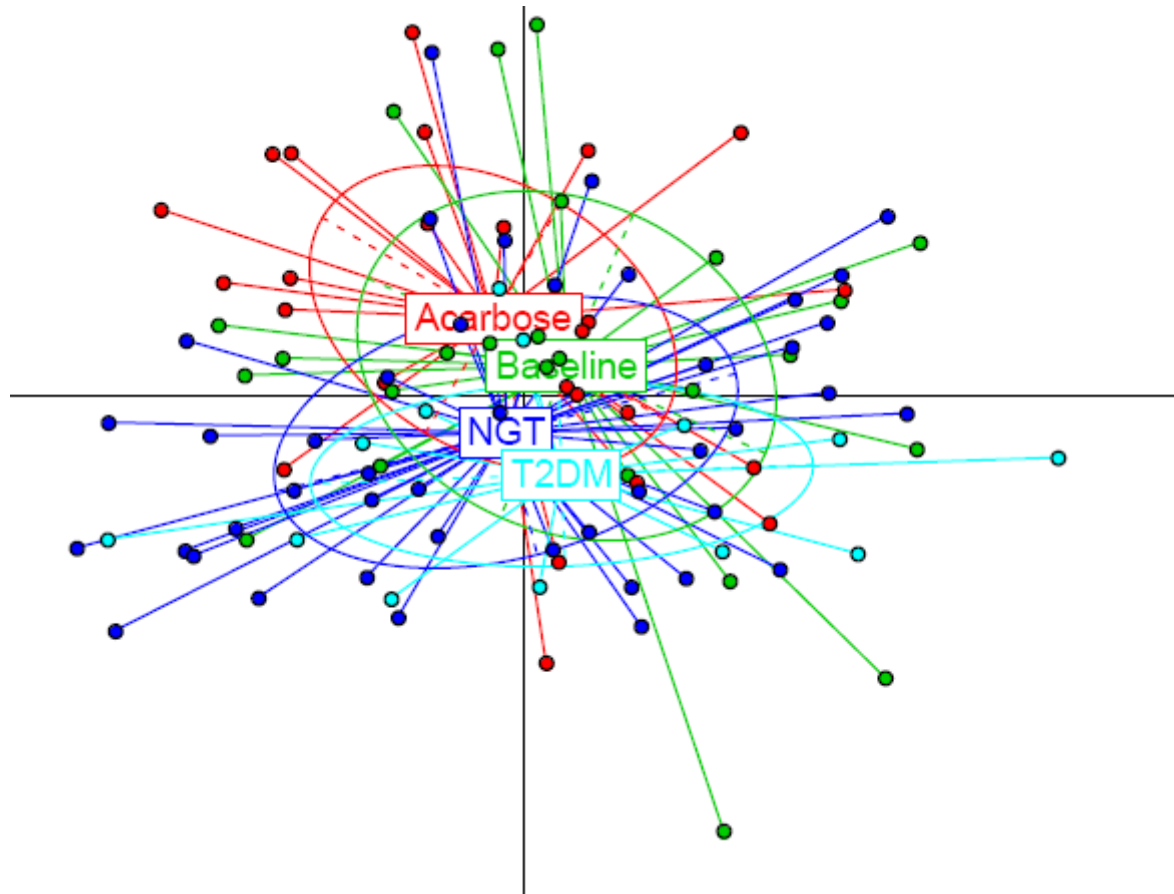
**Figure S2.** The correlations between acarbose-mediated changes in gut microbiota (OUT) and physiological indices based on the Spearman method.



**Figure S3.** The correlations between acarbose-mediated changes in gut microbiota (genera) and physiological indices based on the Spearman method.



**Figure S4.** Acarbose alters the composition of intestinal microbiota in both healthy individuals and T2D patients. The normalized OTU abundance was used to compare the difference of each row. The red, green, blue and cyan dots represent subjects of after and before fed with acarbose, healthy and diabetes.



**Table S1. corelationship between clades and physiological indices calculated based on spearman method**

|            | OTU id               | index | corr         | p.value     |                                                                                    |
|------------|----------------------|-------|--------------|-------------|------------------------------------------------------------------------------------|
| OTU        | 4558                 | HDL   | 0.453515447  | 0.001206829 | Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Subdoligranulum       |
|            | 1818                 | BMI   | 0.413322799  | 0.004772121 | Bacteria;Firmicutes;Clostridia;Clostridiales;Incertae Sedis XIV;Blautia            |
|            | 3989                 | HDL   | 0.392337822  | 0.005814096 | Bacteria;Firmicutes;Clostridia;Clostridiales;Veillonellaceae;Phascolarctobacterium |
|            | 7455                 | 2Hins | 0.37985056   | 0.010062481 | Bacteria;Firmicutes;Erysipelotrichi;Erysipelotrichales;Erysipelotrichaceae         |
|            | 1515                 | CRP   | 0.376842782  | 0.010721695 | Bacteria;Firmicutes;Clostridia;Clostridiales                                       |
|            | 2789                 | 2HPG  | 0.358425241  | 0.012366359 | Bacteria;Firmicutes;Bacilli;Lactobacillales;Streptococcaceae;Streptococcus         |
|            | 4558                 | CH    | 0.355572299  | 0.013131422 | Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Subdoligranulum       |
|            | 2529                 | 2HPG  | 0.354852949  | 0.013330594 | Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Ruminococcus          |
|            | 4558                 | HbA1c | -0.358648113 | 0.012308233 | Bacteria;Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Subdoligranulum       |
|            | 7869                 | 2Hins | -0.361122515 | 0.014802116 | Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Roseburia             |
|            | 5143                 | CH    | -0.387172153 | 0.006555378 | Bacteria;Firmicutes;Erysipelotrichi;Erysipelotrichales;Erysipelotrichaceae         |
|            | 1563                 | HbA1c | -0.402321838 | 0.004585974 | Bacteria;Firmicutes;Clostridia;Clostridiales;Veillonellaceae;Dialister             |
|            | 6010                 | 2HPG  | -0.419860053 | 0.002970004 | Bacteria;Firmicutes;Clostridia;Clostridiales;Lachnospiraceae                       |
|            | Coprobacillus        | HDL   | -0.537177828 | 8.26E-05    |                                                                                    |
| Gene<br>ra | Lactococcus          | TG    | -0.465611354 | 0.000853322 |                                                                                    |
|            | Asaccharobacter      | HbA1c | -0.409937127 | 0.003808252 |                                                                                    |
|            | Bifidobacterium      | Fins  | -0.374552729 | 0.00949115  |                                                                                    |
|            | Faecalibacterium     | CH    | 0.357325083  | 0.012656737 |                                                                                    |
|            | Escherichia/Shigella | LDL   | 0.372139177  | 0.009198739 |                                                                                    |
|            | Escherichia/Shigella | CH    | 0.380931008  | 0.007559477 |                                                                                    |
|            | Escherichia/Shigella | HbA1c | 0.387071038  | 0.006570672 |                                                                                    |

**Table S2:**

|                       | Kruskal<br>Pvalue | Baseline<br>_occr | Acarbose<br>_occr | NGT_<br>occr | T2DM<br>_occr | Baseline_a<br>verAbd | Acarbose_a<br>verAbd | NGT_av<br>erAbd | T2DM_av<br>erAbd |
|-----------------------|-------------------|-------------------|-------------------|--------------|---------------|----------------------|----------------------|-----------------|------------------|
| Dialister             | 1.84E-05          | 0.6               | 0.88              | 0.3409       | 0.6154        | 8.37E-03             | 2.24E-02             | 4.23E-03        | 8.92E-03         |
| Abiotrophia           | 4.23E-05          | 0                 | 0                 | 0.0227       | 0.3077        | 0.00E+00             | 0.00E+00             | 6.12E-06        | 1.36E-04         |
| Lactobacillus         | 0.000282<br>268   | 0.44              | 0.88              | 0.4318       | 0.6923        | 2.04E-03             | 2.70E-02             | 6.84E-03        | 8.83E-04         |
| Peptostreptococcus    | 0.001233<br>485   | 0.08              | 0.04              | 0.0909       | 0.4615        | 2.37E-05             | 8.46E-06             | 3.39E-05        | 2.71E-04         |
| Blautia               | 0.001888<br>399   | 0.96              | 1                 | 1            | 1             | 2.93E-02             | 1.93E-02             | 5.32E-02        | 5.56E-02         |
| Butyricoccus          | 0.010140<br>975   | 1                 | 0.96              | 0.9545       | 1             | 6.02E-03             | 2.60E-03             | 5.61E-03        | 5.79E-03         |
| Haemophilus           | 0.013578<br>368   | 0.64              | 0.56              | 0.3636       | 0.0769        | 4.12E-04             | 4.00E-04             | 2.49E-04        | 4.81E-05         |
| Ruminococcus          | 0.014435<br>884   | 0.96              | 1                 | 0.9545       | 1             | 9.31E-02             | 5.03E-02             | 1.01E-01        | 1.15E-01         |
| Megasphaera           | 0.016781<br>818   | 0.32              | 0.44              | 0.1591       | 0.0769        | 2.80E-03             | 1.83E-02             | 1.46E-03        | 9.78E-04         |
| Dorea                 | 0.019914<br>029   | 1                 | 1                 | 1            | 1             | 1.72E-02             | 1.11E-02             | 2.88E-02        | 4.19E-02         |
| Veillonella           | 0.020002<br>934   | 0.76              | 0.72              | 0.5455       | 0.3846        | 1.96E-03             | 1.01E-02             | 7.78E-04        | 1.54E-04         |
| Gemella               | 0.021442<br>127   | 0.36              | 0.24              | 0.4545       | 0.6923        | 1.41E-04             | 4.77E-05             | 1.93E-04        | 2.48E-04         |
| Cloacibacillus        | 0.024711<br>147   | 0                 | 0                 | 0.1136       | 0.2308        | 0.00E+00             | 0.00E+00             | 3.39E-05        | 5.07E-05         |
| Phascolarctobacterium | 0.025022<br>874   | 0.92              | 0.68              | 0.8182       | 0.8462        | 1.56E-02             | 5.39E-03             | 1.34E-02        | 2.39E-02         |
| Bacteroides           | 0.029439<br>591   | 1                 | 1                 | 1            | 1             | 2.88E-01             | 1.94E-01             | 2.44E-01        | 1.30E-01         |
| Morganella            | 0.064895<br>009   | 0                 | 0                 | 0            | 0.0769        | 0.00E+00             | 0.00E+00             | 0.00E+00        | 1.89E-05         |
| Acidovorax            | 0.064895<br>009   | 0                 | 0                 | 0            | 0.0769        | 0.00E+00             | 0.00E+00             | 0.00E+00        | 9.46E-06         |
| Phenylobacterium      | 0.064895<br>009   | 0                 | 0                 | 0            | 0.0769        | 0.00E+00             | 0.00E+00             | 0.00E+00        | 1.60E-05         |
| Sutterella            | 0.067027<br>663   | 0.32              | 0.36              | 0.1364       | 0.3846        | 1.65E-03             | 8.75E-04             | 7.23E-05        | 2.72E-04         |
| Granulicatella        | 0.067918<br>182   | 0.56              | 0.44              | 0.5909       | 0.7692        | 2.72E-04             | 1.12E-04             | 2.61E-04        | 6.32E-04         |
| Coprobaillus          | 0.074559<br>384   | 0.4               | 0.24              | 0.5455       | 0.3846        | 2.26E-04             | 9.55E-05             | 3.22E-04        | 8.51E-04         |
| Acidaminococcus       | 0.077003<br>325   | 0.12              | 0.24              | 0.0682       | 0             | 3.27E-04             | 2.32E-03             | 2.77E-04        | 0.00E+00         |
| Neisseria             | 0.084977<br>562   | 0                 | 0.08              | 0            | 0             | 0.00E+00             | 1.01E-05             | 0.00E+00        | 0.00E+00         |
| Leptotrichia          | 0.084977<br>562   | 0.08              | 0                 | 0            | 0             | 9.40E-06             | 0.00E+00             | 0.00E+00        | 0.00E+00         |
| Allisonella           | 0.115593<br>76    | 0.24              | 0.4               | 0.2045       | 0.1538        | 1.67E-04             | 6.97E-04             | 1.84E-04        | 5.42E-05         |
| Eggerthella           | 0.131978<br>867   | 0.52              | 0.44              | 0.5909       | 0.5385        | 4.90E-04             | 1.26E-04             | 9.93E-04        | 5.75E-04         |
| Weissella             | 0.138438<br>988   | 0.36              | 0.12              | 0.2045       | 0.3846        | 1.41E-04             | 1.60E-05             | 4.90E-04        | 7.74E-04         |
| Faecalibacterium      | 0.147760<br>404   | 1                 | 1                 | 0.9773       | 1             | 1.25E-01             | 1.76E-01             | 9.64E-02        | 9.28E-02         |
| Subdoligranulum       | 0.149188<br>804   | 1                 | 1                 | 1            | 0.9231        | 7.21E-02             | 1.20E-01             | 1.15E-01        | 1.54E-01         |
| Coprococcus           | 0.163177<br>11    | 1                 | 1                 | 1            | 1             | 3.31E-02             | 2.32E-02             | 3.57E-02        | 3.46E-02         |
| Megamonas             | 0.169209<br>617   | 0.36              | 0.52              | 0.2727       | 0.3077        | 1.58E-02             | 1.66E-02             | 5.64E-03        | 2.61E-03         |
| Olsenella             | 0.173524<br>696   | 0.04              | 0.16              | 0.0682       | 0.2308        | 2.87E-06             | 2.98E-03             | 4.23E-05        | 8.72E-05         |
| Clostridium           | 0.186031<br>547   | 0.6               | 0.6               | 0.6818       | 0.3846        | 1.07E-03             | 1.31E-03             | 1.60E-03        | 2.58E-03         |
| Bifidobacterium       | 0.193989<br>86    | 0.2               | 0.44              | 0.1818       | 0.2308        | 5.67E-05             | 8.70E-05             | 5.46E-05        | 4.50E-05         |
| Anaerovorax           | 0.195835<br>451   | 0.08              | 0.08              | 0            | 0             | 1.56E-04             | 1.18E-05             | 0.00E+00        | 0.00E+00         |
| Leuconostoc           | 0.221694          | 0.04              | 0.04              | 0.1591       | 0.1538        | 7.39E-06             | 3.47E-06             | 8.00E-05        | 7.81E-05         |

|                          |             |      |      |        |        |          |          |          |          |
|--------------------------|-------------|------|------|--------|--------|----------|----------|----------|----------|
| Anaerococcus             | 0.223526533 | 0    | 0    | 0.0682 | 0      | 0.00E+00 | 0.00E+00 | 1.10E-05 | 0.00E+00 |
| Providencia              | 0.227645272 | 0    | 0.04 | 0      | 0.0769 | 0.00E+00 | 6.52E-06 | 0.00E+00 | 2.89E-04 |
| Acinetobacter            | 0.234022056 | 0.08 | 0.04 | 0      | 0      | 1.78E-05 | 5.68E-06 | 0.00E+00 | 0.00E+00 |
| Lactonifactor            | 0.234954657 | 0.12 | 0.08 | 0.1136 | 0.3077 | 2.40E-05 | 5.26E-06 | 4.02E-05 | 4.88E-05 |
| Oribacterium             | 0.25004343  | 0.28 | 0.08 | 0.1591 | 0.1538 | 6.37E-05 | 7.27E-06 | 2.82E-05 | 3.73E-05 |
| Catenibacterium          | 0.254545199 | 0    | 0.04 | 0.0682 | 0.1538 | 0.00E+00 | 8.30E-05 | 5.93E-04 | 1.16E-03 |
| Collinsella              | 0.26205641  | 0.6  | 0.84 | 0.7955 | 0.6154 | 7.21E-03 | 8.78E-03 | 1.95E-02 | 1.59E-02 |
| Holdemania               | 0.283956319 | 0.64 | 0.44 | 0.6136 | 0.6154 | 3.90E-04 | 1.79E-04 | 3.64E-04 | 4.76E-04 |
| Slackia                  | 0.288762531 | 0.16 | 0.04 | 0.2045 | 0.2308 | 2.10E-04 | 1.14E-04 | 2.76E-04 | 6.75E-04 |
| Anaerostipes             | 0.302397316 | 0.92 | 1    | 0.9091 | 1      | 7.18E-03 | 4.95E-03 | 9.52E-03 | 1.16E-02 |
| Akkermansia              | 0.303242626 | 0.2  | 0.08 | 0.2273 | 0.0769 | 9.26E-05 | 2.91E-05 | 1.50E-04 | 4.82E-05 |
| Anaerofustis             | 0.32012483  | 0.12 | 0    | 0.0909 | 0.1538 | 1.58E-05 | 0.00E+00 | 3.03E-05 | 1.06E-04 |
| Citrobacter              | 0.335651624 | 0.2  | 0.24 | 0.1818 | 0      | 6.68E-05 | 1.09E-04 | 1.16E-04 | 0.00E+00 |
| Barnesiella              | 0.349307582 | 0.52 | 0.6  | 0.4773 | 0.6923 | 6.55E-03 | 5.26E-03 | 2.86E-03 | 6.46E-03 |
| Chitinophaga             | 0.350435987 | 0.04 | 0    | 0      | 0      | 5.70E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Sphingobacterium         | 0.350435987 | 0.04 | 0    | 0      | 0      | 5.70E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Enhydrobacter            | 0.350435987 | 0.04 | 0    | 0      | 0      | 9.83E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Aggregatibacter          | 0.350435987 | 0.04 | 0    | 0      | 0      | 2.87E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Bacillus                 | 0.350435987 | 0.04 | 0    | 0      | 0      | 8.12E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Bosea                    | 0.350435987 | 0    | 0.04 | 0      | 0      | 0.00E+00 | 7.88E-06 | 0.00E+00 | 0.00E+00 |
| Carnobacterium           | 0.350435987 | 0    | 0.04 | 0      | 0      | 0.00E+00 | 3.32E-06 | 0.00E+00 | 0.00E+00 |
| Cryobacterium            | 0.350435987 | 0    | 0.04 | 0      | 0      | 0.00E+00 | 5.68E-06 | 0.00E+00 | 0.00E+00 |
| Hymenobacter             | 0.350435987 | 0    | 0.04 | 0      | 0      | 0.00E+00 | 5.68E-06 | 0.00E+00 | 0.00E+00 |
| Nocardioides             | 0.350435987 | 0    | 0.04 | 0      | 0      | 0.00E+00 | 2.27E-05 | 0.00E+00 | 0.00E+00 |
| Macrococcus              | 0.350435987 | 0.04 | 0    | 0      | 0      | 5.23E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Alistipes                | 0.38573489  | 1    | 0.84 | 0.8409 | 0.8462 | 2.14E-02 | 2.66E-02 | 1.66E-02 | 1.41E-02 |
| Gordonibacter            | 0.39391752  | 0.44 | 0.32 | 0.5    | 0.4615 | 1.62E-04 | 1.53E-04 | 2.87E-04 | 3.20E-04 |
| Methanobrevibacter       | 0.408793588 | 0    | 0    | 0.0455 | 0      | 0.00E+00 | 0.00E+00 | 1.39E-05 | 0.00E+00 |
| Hydrogenoanaerobacterium | 0.408793588 | 0    | 0    | 0.0455 | 0      | 0.00E+00 | 0.00E+00 | 7.31E-06 | 0.00E+00 |
| Uruburuella              | 0.408793588 | 0    | 0    | 0.0455 | 0      | 0.00E+00 | 0.00E+00 | 4.30E-05 | 0.00E+00 |
| Proteus                  | 0.408793588 | 0    | 0    | 0.0455 | 0      | 0.00E+00 | 0.00E+00 | 8.60E-06 | 0.00E+00 |
| Actinomyces              | 0.418343201 | 0.48 | 0.48 | 0.4318 | 0.6154 | 1.38E-04 | 1.05E-04 | 1.68E-04 | 4.65E-04 |
| Acetanaerobacterium      | 0.418631778 | 0.16 | 0.08 | 0.0455 | 0.1538 | 8.41E-05 | 2.17E-05 | 3.87E-05 | 1.37E-05 |
| Stenotrophomonas         | 0.425225108 | 0.08 | 0    | 0.0455 | 0      | 1.17E-05 | 0.00E+00 | 7.45E-06 | 0.00E+00 |
| Enterorhabdus            | 0.447192883 | 0.04 | 0    | 0.0682 | 0      | 5.70E-06 | 0.00E+00 | 7.34E-05 | 0.00E+00 |
| Comamonas                | 0.455606935 | 0.08 | 0.04 | 0.1136 | 0      | 1.14E-05 | 3.32E-06 | 2.83E-05 | 0.00E+00 |
| Sporacetigenium          | 0.502363843 | 0.8  | 0.84 | 0.8636 | 0.9231 | 1.79E-03 | 1.36E-03 | 2.12E-03 | 4.30E-03 |

|                      |             |      |      |        |        |          |          |          |          |
|----------------------|-------------|------|------|--------|--------|----------|----------|----------|----------|
| Parasutterella       | 0.502623711 | 0.72 | 0.68 | 0.5682 | 0.4615 | 3.36E-03 | 3.39E-03 | 1.61E-03 | 3.08E-03 |
| Selenomonas          | 0.506269908 | 0.08 | 0.08 | 0.0227 | 0      | 9.32E-06 | 2.14E-05 | 1.32E-04 | 0.00E+00 |
| Anaerotruncus        | 0.511073331 | 0.24 | 0.24 | 0.3864 | 0.2308 | 1.64E-04 | 1.93E-04 | 2.35E-04 | 5.43E-05 |
| Lactococcus          | 0.511304777 | 0.16 | 0.24 | 0.3409 | 0.2308 | 4.31E-03 | 1.65E-03 | 2.39E-04 | 8.57E-04 |
| Prevotella           | 0.511418717 | 0.72 | 0.56 | 0.5    | 0.6923 | 6.01E-02 | 8.22E-02 | 4.29E-02 | 5.01E-02 |
| Victivallis          | 0.512159544 | 0.04 | 0.04 | 0      | 0      | 3.61E-06 | 7.62E-06 | 0.00E+00 | 0.00E+00 |
| Succinivibrio        | 0.512159544 | 0.04 | 0.04 | 0      | 0      | 2.28E-05 | 2.91E-06 | 0.00E+00 | 0.00E+00 |
| Butyricimonas        | 0.523596834 | 0.72 | 0.48 | 0.4318 | 0.6923 | 1.21E-03 | 1.17E-03 | 8.99E-04 | 9.68E-04 |
| Papillibacter        | 0.526190371 | 0.24 | 0.12 | 0.25   | 0.3077 | 1.74E-04 | 7.68E-05 | 1.10E-04 | 2.16E-04 |
| Atopobium            | 0.538562471 | 0.12 | 0.04 | 0.0682 | 0.1538 | 1.24E-05 | 4.86E-06 | 9.71E-06 | 3.21E-05 |
| Howardella           | 0.538982083 | 0.04 | 0.12 | 0.1591 | 0.0769 | 1.27E-04 | 2.30E-04 | 2.69E-04 | 2.08E-04 |
| Ethanoligenens       | 0.552604639 | 0.08 | 0    | 0.0455 | 0.0769 | 6.29E-05 | 0.00E+00 | 3.54E-05 | 3.66E-05 |
| Porphyromonas        | 0.556491159 | 0.04 | 0.04 | 0.0909 | 0      | 8.74E-06 | 2.40E-06 | 1.97E-05 | 0.00E+00 |
| Escherichia/Shigella | 0.574095972 | 0.84 | 0.92 | 0.8409 | 0.7692 | 2.12E-02 | 2.68E-02 | 6.01E-03 | 1.07E-02 |
| Anaerosporebacter    | 0.578700219 | 0.04 | 0    | 0.0227 | 0.0769 | 1.37E-05 | 0.00E+00 | 3.06E-06 | 5.23E-06 |
| Odoribacter          | 0.586571671 | 0.76 | 0.64 | 0.6364 | 0.6923 | 1.67E-03 | 1.07E-03 | 1.03E-03 | 9.38E-04 |
| Roseburia            | 0.60201367  | 1    | 1    | 0.9545 | 1      | 9.38E-02 | 7.31E-02 | 1.03E-01 | 1.43E-01 |
| Streptococcus        | 0.637848027 | 1    | 1    | 0.9545 | 0.9231 | 1.44E-02 | 1.44E-02 | 3.02E-02 | 7.43E-03 |
| Corynebacterium      | 0.652589806 | 0.04 | 0    | 0.0455 | 0.0769 | 2.09E-06 | 0.00E+00 | 9.48E-06 | 8.43E-06 |
| Fusobacterium        | 0.65445844  | 0.08 | 0.04 | 0.1364 | 0.0769 | 3.15E-05 | 3.38E-05 | 3.35E-05 | 9.01E-05 |
| Oxalobacter          | 0.657208252 | 0.08 | 0.04 | 0.0909 | 0.1538 | 5.86E-05 | 7.90E-06 | 3.62E-05 | 5.52E-05 |
| Methylobacterium     | 0.663734605 | 0.04 | 0    | 0.0455 | 0.0769 | 8.67E-06 | 0.00E+00 | 5.89E-06 | 9.46E-06 |
| Turicibacter         | 0.691501721 | 0.44 | 0.48 | 0.5227 | 0.5385 | 3.61E-04 | 6.25E-04 | 7.77E-04 | 6.47E-04 |
| Ochrobactrum         | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.99E-06 | 0.00E+00 |
| Atopostipes          | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.99E-06 | 0.00E+00 |
| Facklamia            | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.99E-06 | 0.00E+00 |
| Arcanobacterium      | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.99E-06 | 0.00E+00 |
| Moryella             | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 1.88E-06 | 0.00E+00 |
| Sarcina              | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 4.20E-06 | 0.00E+00 |
| Pseudoramibacter     | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.75E-06 | 0.00E+00 |
| Proteocatella        | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 8.96E-06 | 0.00E+00 |
| Actinobaculum        | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 7.48E-06 | 0.00E+00 |
| Chryseobacterium     | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.50E-05 | 0.00E+00 |
| Dolosicoccus         | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.99E-06 | 0.00E+00 |
| Deinococcus          | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 3.69E-06 | 0.00E+00 |
| Ktedonobacter        | 0.698093613 | 0    | 0    | 0.0227 | 0      | 0.00E+00 | 0.00E+00 | 2.99E-06 | 0.00E+00 |
| Staphylococcus       | 0.708718147 | 0.04 | 0    | 0.0227 | 0      | 1.48E-05 | 0.00E+00 | 3.48E-06 | 0.00E+00 |
| Sharpea              | 0.708718    | 0    | 0.04 | 0.0227 | 0      | 0.00E+00 | 6.90E-06 | 3.25E-06 | 0.00E+00 |



|                 |                 |      |      |        |        |          |          |          |          |
|-----------------|-----------------|------|------|--------|--------|----------|----------|----------|----------|
|                 | 147             |      |      |        |        |          |          |          |          |
| Desulfovibrio   | 0.708718<br>147 | 0.04 | 0    | 0.0227 | 0      | 6.83E-06 | 0.00E+00 | 3.69E-06 | 0.00E+00 |
| Peptococcus     | 0.716927<br>346 | 0    | 0.04 | 0.0227 | 0      | 0.00E+00 | 3.95E-06 | 3.06E-06 | 0.00E+00 |
| Paraeggerthella | 0.716927<br>346 | 0.04 | 0    | 0.0227 | 0      | 7.39E-06 | 0.00E+00 | 1.74E-05 | 0.00E+00 |
| Plesiomonas     | 0.716927<br>346 | 0.04 | 0    | 0.0227 | 0      | 3.58E-06 | 0.00E+00 | 5.99E-06 | 0.00E+00 |
| Petrimonas      | 0.716927<br>346 | 0.04 | 0    | 0.0227 | 0      | 5.70E-06 | 0.00E+00 | 5.01E-06 | 0.00E+00 |
| Enterococcus    | 0.729406<br>116 | 0.24 | 0.28 | 0.3182 | 0.3077 | 1.06E-04 | 5.27E-04 | 9.91E-04 | 6.86E-04 |
| Oscillibacter   | 0.745929<br>973 | 0.96 | 0.92 | 0.9091 | 0.9231 | 1.45E-02 | 1.05E-02 | 1.04E-02 | 1.17E-02 |
| Asaccharobacter | 0.767647<br>778 | 0.6  | 0.56 | 0.4773 | 0.6154 | 7.86E-04 | 2.38E-04 | 7.62E-04 | 3.15E-03 |
| Eubacterium     | 0.778511<br>246 | 0.56 | 0.56 | 0.6136 | 0.8462 | 4.39E-03 | 4.26E-03 | 4.35E-03 | 1.30E-03 |
| Anaerofilum     | 0.840204<br>967 | 0.08 | 0.12 | 0.1364 | 0.1538 | 1.06E-05 | 1.35E-05 | 5.30E-05 | 5.05E-05 |
| Parabacteroides | 0.849569<br>689 | 0.96 | 1    | 0.9773 | 0.8462 | 1.15E-02 | 1.26E-02 | 1.61E-02 | 1.10E-02 |
| Klebsiella      | 0.856865<br>546 | 0.56 | 0.48 | 0.4773 | 0.4615 | 1.36E-03 | 1.97E-03 | 5.49E-03 | 9.56E-04 |
| Mitsuokella     | 0.873544<br>406 | 0.04 | 0.08 | 0.0455 | 0.0769 | 4.68E-04 | 6.15E-03 | 1.64E-05 | 1.77E-02 |
| Peptoniphilus   | 0.889780<br>514 | 0.12 | 0.12 | 0.0682 | 0.0769 | 1.26E-05 | 1.44E-05 | 1.26E-05 | 2.57E-05 |
| Pyramidobacter  | 0.906643<br>23  | 0.08 | 0.04 | 0.0455 | 0.0769 | 8.29E-06 | 6.35E-06 | 8.76E-06 | 3.86E-05 |
| Parvimonas      | 0.929660<br>492 | 0.08 | 0.12 | 0.0682 | 0.0769 | 1.16E-05 | 1.27E-05 | 1.26E-05 | 3.21E-05 |
| Finegoldia      | 0.944792<br>111 | 0.08 | 0.04 | 0.0682 | 0.0769 | 1.25E-05 | 7.88E-06 | 9.57E-06 | 2.57E-05 |
| Sporobacter     | 0.947302<br>569 | 0.52 | 0.52 | 0.4773 | 0.4615 | 3.92E-04 | 3.64E-04 | 2.66E-04 | 3.84E-04 |
| Paraprevotella  | 0.975623<br>106 | 0.32 | 0.36 | 0.3182 | 0.3846 | 2.80E-03 | 3.14E-03 | 3.15E-03 | 4.46E-03 |
| Acetivibrio     | 0.988348<br>446 | 0.28 | 0.32 | 0.2727 | 0.3077 | 1.23E-03 | 1.17E-03 | 9.03E-04 | 1.17E-04 |