Table S1. Main characteristics of six infants

## **Supplementary Material**

Delivery Full-term Birth Feeding Sample Sexuality Age(d) Antibiotic Probiotic weight(g) mode delivery mode Vaginal Breast A1 Girl 120 2800 Yes No No delivered milk Vaginal Breast A2 Girl 127 3320 Yes No No delivered milk Vaginal Breast A3 Girl 118 3570 Yes No No delivered milk Vaginal Breast Amoxicillin B1 Girl 125 3740 No Yes delivered milk (560mg, 3d) Vaginal Breast Amoxicillin B2 Girl 3690 110 Yes No delivered milk (625mg, 3d) Vaginal Breast Amoxicillin B3 Girl 121 3150 Yes No delivered milk (680mg, 4d)

Number	Fluid medium	Plate cultivation	Culture environment
1	Preincubation in aerobic blood culture bottle with stool filtered at 5 $\mu$ m	5% sheep blood agar	Aerobic conditions at 37°C
2	Preincubation in aerobic blood culture bottle with 5 ml sheep blood		Aerobic conditions at 37°C
3	Preincubation in aerobic blood culture bottle with 5 ml rumen fluid and sheep blood		Aerobic conditions at 37°C
4	Preincubation in aerobic blood culture bottle with 5 ml rumen fluid		Aerobic conditions at 37°C
5	Preincubation in anaerobic blood culture bottle after thermic sh°Ck at 80°C maintain 20 min		Anaerobic conditions at 37°C
6	Preincubation in anaerobic blood culture bottle with stool filtered at 5 μm		Anaerobic conditions at 37°C
7	Preincubation in anaerobic blood culture bottle with 5 ml sheep blood		Anaerobic conditions at 37°C
8	Preincubation in anaerobic blood culture bottle		Anaerobic conditions at 37°C
9	Preincubation in anaerobic blood culture bottle with 5 ml rumen fluid and sheep blood		Anaerobic conditions at 37°C
10	Preincubation in anaerobic blood culture bottle with 5 ml rumen fluid		Anaerobic conditions at 37°C
11 12	Preincubation under anaerobic conditions in marine broth Preincubation in aerobic marine broth		Anaerobic conditions at 37°C Aerobic conditions at 37°C
13	Preincubation under aerobic conditions in 5% sheep blood broth		Aerobic conditions at 37°C
14	Preincubation under anaerobic conditions in 5% sheep blood broth		Anaerobic conditions at 28°C
15	Preincubation under aerobic conditions in 5% sheep blood broth		Aerobic conditions at 28°C
16	Preincubation under anaerobic conditions in 5% sheep blood broth		Anaerobic conditions at 37°C
17	Preincubation under aerobic conditions in Trypticase soy broth		Aerobic conditions at 37°C
18	Preincubation under aerobic conditions in brain heart infusion broth with 5% sheep blood		Aerobic conditions at 37°C

## Table S2. 18 classical culture conditions of culturomics