

Supplementary Matter

Methylobacterium spp. Inhibition of *M. avium* Adherence

Table S1. Adherence of *M. avium* strain A5 to stainless steel coupons in the presence and absence of established normal microbial and *Methylobacterium* spp. biofilms measured by colony counts^{1, 2}

| Hours | No Biofilm | Normal Flora | <i>Methylobacterium</i> Consortium 1 | <i>Methylobacterium</i> Consortium 2 |
|-------|------------|----------------------|--------------------------------------|--------------------------------------|
| 0 | 130 ± 11 | 690 ± 48 (< 0.05) | 8.9 ± 1.8 (< 0.01) | 5.5 ± 1.2 (< 0.01) |
| 1 | 100 ± 5 | 1,600 ± 132 (< 0.05) | 64 ± 11 (NS) | 66 ± 5.5 (NS) |
| 2 | 400 ± 28 | 2,050 ± 52 (< 0.05) | 45 ± 5.6 (< 0.001) | 13 ± 1.6 (< 0.001) |
| 3 | 430 ± 33 | 1,900 ± 68 (< 0.05) | 76 ± 13 (< 0.05) | 28 ± 3.2 (< 0.01) |
| 6 | 1,100 ± 78 | 5,600 ± 342 (< 0.05) | 220 ± 30 (< 0.05) | 148 ± 8 (< 0.001) |

¹Average number of CFU/cm² ± standard deviation adhering to each coupon type of triplicate measurements from two independent experiments.

²(Statistical significance, ANOVA) compared to no biofilm

Table S2. Effect of 10 mM azide and 10 mM cyanide exposure to *Methylobacterium* spp. biofilms on adherence of *M. avium* strain A5¹

| Hours | Consortium 1 Live | Consortium 1 Poisoned | Consortium 2 Live | Consortium 2 Poisoned |
|-------|-------------------|-----------------------|-------------------|-----------------------|
| 0 | < 200 | < 200 | < 200 | < 200 |
| 2 | 7,900 ± 2,300 | 9,800 ± 2,200 | 9,800 ± 2,000 | 11,000 ± 5,000 |
| 3 | 15,000 ± 2,000 | 15,000 ± 1,000 | 20,000 ± 3,000 | 23,000 ± 2,000 |

¹Average number of CFU/cm² ± standard deviation adhering to each coupon type of triplicate measurements from two independent experiments.

Table S3. Effect of ultraviolet irradiation of *Methylobacterium* spp. biofilms on adherence of *M. avium* strain A5¹

| Hours | Consortium 1 Live | Consortium 1 UV-Irradiated | Consortium 2 Live | Consortium 2 UV-Irradiated |
|-------|-------------------|----------------------------|-------------------|----------------------------|
| 0 | 200 ± 180 | 190 ± 100 | 390 ± 80 | 340 ± 170 |
| 2 | 2,900 ± 1,700 | 3,600 ± 1,500 | 4,300 ± 2,200 | 5,100 ± 1,500 |
| 3 | 2,800 ± 1,100 | 3,500 ± 2,700 | 3,400 ± 2,200 | 5,300 ± 1,400 |

¹ Average number of CFU/cm² ± standard deviation adhering to each coupon type of triplicate measurements from two independent experiments