Supplementary Figure 1. Growth of the isolate panel in culture media without cells. (A) Growth of *Arthrobacter*, Isolate 4, in 7H9 broth culture incubated at 37 °C or 22 °C. n=3 independent experiments. ****, p < 0.0001. (B) Growth of the isolate panel in PYG culture incubated at 22 °C; no amoebae. n=3 independent experiments. *, p <0.05; **, p < 0.005; ****, p < 0.0001. (C) Growth of the isolate panel in standard THP-1 culture media (containing antibiotics/antimycotics) at 37 °C; no cells. n=3 independent experiments. (D) Growth of Isolate 7 (MABS ATCC 19977) or *Arthrobacter* (Isolate 4) in standard THP-1 culture media or THP-1 media without antibiotics/antimycotics at 22 °C. n=1 independent experiment. Isolate 4 = *Arthrobacter sp.*
Supplementary Figure 2. CFU differences between MABS isolates when stratified by environmental or clinical groups. Data from Figures 3A, 3C, and 4A were re-analyzed by type of MABS isolate. Isolates 3, 5, and 6 were grouped together as environmental and Isolates 1, 2, 7, and 8 were categorized as clinical MABS isolates. Changes in CFU between environmental and clinical MABS isolates in BEAS-2B (A), alveolar macrophages (B), or THP-1 macrophages (C) are reported. N.S. = no significance.
Supplementary Figure 3. Multiplex analyte differences between MABS isolates when stratified as environmental or clinical groups vs. *Arthrobacter*. Data from Figure 5 was re-analyzed by type of MABS isolate. Isolates 3, 5, and 6 were grouped together as environmental and Isolates 1, 2, 7, and 8 were categorized as clinical MABS isolates and compared to results from the single *Arthrobacter* isolate tested. Changes in multiplex analytes between environmental and clinical MABS isolates and *Arthrobacter* at 24 (A), 48 (B), or 96 (C) hours post co-culture are reported.
Supplementary Figure 4. Resistance and inactivation of LL-37 by *Arthrobacter*. *Arthrobacter* was incubated in the presence of 0, 25 or 150 µg/ml of synthetic LL-37 peptide or 0.1% TFA vehicle control. Change in CFU after incubation at 37 °C (A) or 22 °C (B) are reported. ****, p < 0.0001. n=3 independent experiments. (C-D) *E. coli* bioassays were used to assess the potency of LL-37 remaining in culture after 96 hours of incubation with *Arthrobacter*. Representative images are shown. For these images, A = *E. coli* + 25 µg/ml LL-37. B = *E. coli* alone. C = *E. coli* + vehicle (0.1 % TFA). D = *E. coli* incubated in Arthrobacter culture supernatants with 25 µg/ml of LL-37 after 96 hours. E = *E. coli* incubated in Arthrobacter culture supernatants with 150 µg/ml of LL-37 after 96 hours. Note: The order of “D” and “E” are opposite in C and D.