



**Extended Data Figure 10 | High-throughput screening of acoustic phenotypes.** **a**, Ultrasound intensity histogram of 22 randomly picked colonies. Colonies with low contrast were predicted to contain the gene encoding GFP and those with high contrast to contain genes encoding *arg1* or *arg2* genes. **b**, Normalized change in ultrasound intensity ( $U$ ) for each of the 15 *arg1* or *arg2* colonies after insonation at increasing pressures. At 4 MPa, colonies with signal above the indicated threshold were predicted to be *arg1* and below to be *arg2*. This experiment was performed once; each colony was treated as a biological replicate.