

amplification, wherein the container comprises a first layer and a second layer configured to move relative to the other between a first position, where the plurality of analysis regions and the plurality of reagent regions are isolated from each other, and a second position, wherein at least some of the plurality of analysis regions is in fluid communication with at least some of the plurality of reagent regions; and

instructions for use for determining a resistance or susceptibility to an antibiotic in a population of bacteria.

41. The kit of claim 40, wherein said component of a nucleic acid amplification comprises primers for amplifying *recA* or *lexA* mRNA.
42. The kit of claim 40, wherein said component of a nucleic acid amplification comprises primers for amplifying a nucleic acid target on a bacterial chromosome or plasmid less than 50kDa, less than 100 kDa, less than 200 kDa, or less than 400 kDa from the origin of replication.
43. The kit of claim 40, wherein the container comprises at least 10, 20, 30, 40, or 50 analysis regions.
44. The kit of claim 40, wherein the container comprises at least 10, 20, 30, 40, or 50 reagent regions.
45. The kit of claim 40, wherein said antibiotic is selected from the group consisting of: aminoglycosides, cephalosporins, tetracyclines, sulfonamides, macrolides, vancomycin, and β -lactams.
46. The kit of claim 45, wherein said instructions indicate that a decrease in nucleic acid target detection in a portion of the population of bacteria treated with said antibiotic as compared to a portion of the population of bacteria not treated with said antibiotic indicates that the population of bacteria is susceptible to said antibiotic.
47. The kit of claim 40, wherein said antibiotic is selected from the group consisting of: HPUra, hydroxyurea, trimethoprim, ciprofloxacin, and MMC.
48. The kit of claim 47, wherein said instructions indicate that an increase in nucleic acid target detection in a portion of the population of bacteria treated with said antibiotic as compared to a portion of the population of bacteria not treated with said antibiotic indicates that the population of bacteria is susceptible to said antibiotic.
49. A device for processing a sample, comprising an incubation module, a sample preparation module, and a digital quantification module, wherein said device is configurable to place each module in fluid communication with the other modules;