

Minimum inhibitory concentration

The minimum inhibitory concentration (MIC) is the smallest concentration of antimicrobial substances , which inhibits visible growth of microorganism. An increase / inhibition readout can only be carried out when it occurs in a control well (hole with inoculated broth without the addition of an antimicrobial substance) to turbidity, ie the observable growth of bacteria. Template:Dobrý příklad

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| A | | | | | | | X | | | | | |
| B | X | | | | | | | | | | | |
| C | | | | X | | | | | | | | |
| D | | | | | X | | | | | | | |
| E | | | | | | X | X | | | | | |
| F | | | | | | | | | | | | |
| G | | | X | | | | | | | | | |
| H | | | | | | | | | | | | |
| | FEN | OXA | AMP | AMS | CMP | CCT | ERY | CIN | DOX | GEN | TEI | VAN |
| c (mg/l) | 8 | 16 | 0,2 | 8 | 1 | 1 | 16 | 8 | - | 2 | 8 | 16 |

Method

1. The strain is inoculated into the wells of the microtiter plates with the medium, where the added concentration increases in a row of antibiotic;
2. We incubate until checking (usually overnight) increases
3. We observe turbidity or sediment - from the first hole, where growth is already suppressed and the medium remained clean, reading the MIC.

Links

Related articles

- Antibiotics
- Incubation time
- Minimal bactericidal concentration
- E-test
- Disc diffusion test