

**BDR006**

**Gram positive ring**

**SPECIFICATIONS:**

**COLOUR:** White ring having 12 discs of 6 mm diameter each with abbreviation in red

**DIRECTIONS:**

1. Prepare sterile plates of Mueller Hinton Agar (B263).
2. Prepare inoculum as per Bauer-Kirby Method-make a pure inoculum of culture. Inoculate pure single colony of test organism – *E. coli* (ATCC 25922), *S. aureus* (25923) and *P. aeruginosa* (27853), in 5ml Pre tested sterile SCDM (B040) in a test tube & incubate at 36 to 37°C for 2 hours. Compare the inoculum turbidity with that of standard 0.5McFARLAND STANDARD (BA 132).
3. Dip a sterile swab into the standardized inoculum and press against the wall of the test tube to remove excess liquid.
4. Swab the plates by rotating in all directions till the plate becomes dry.
5. Place the antimicrobial ring on the swabbed plates aseptically with the help of alcohol dipped flame sterilized forceps. Press the ring properly on the plates.
6. Incubate the plates at 36°C - 37°C for 18- 24 hours.
7. Measure the zones showing complete inhibition and record the diameters of the zones to the nearest millimetre using a calibrated instrument like zone scales.

**RESULTS:** Average diameter of zone of inhibition is observed on Mueller Hinton Agar (B263) after 18-24 hours incubation at 36°C -37°C for standard cultures.

| Antimicrobial agent, micro-organism with ATCC number | Diameter of zone of inhibition |                    |                         |                             |
|--|--------------------------------|--------------------|-------------------------|-----------------------------|
|  | Interpretative criteria        |                    |                         | Quality control limit in mm |
|  | Sensitive<br>mm or more        | Intermediate<br>mm | Resistant<br>mm or less |                             |
| Amoxycillin- clavulanate<br>30mcg AUG                |                                |                    |                         |                             |
| EC (ATCC 25922)                                      | 18                             | 14-17              | 13                      | 18-24                       |
| SA (ATCC 25923)                                      | 20                             | --                 | 19                      | 28-36                       |
| PS (ATCC 27853)                                      | --                             | --                 | --                      | --                          |
| Cefotaxime 25mcg CTX                                 |                                |                    |                         |                             |
| EC (ATCC 25922)                                      | --                             | --                 | --                      | --                          |
| SA (ATCC 25923)                                      | --                             | --                 | --                      | --                          |
| PS (ATCC 27853)                                      | --                             | --                 | --                      | --                          |
| Ceftriaxone-sulbactam 45mcg CRO                      |                                |                    |                         |                             |
| EC (ATCC 25922)                                      | --                             | --                 | --                      | --                          |
| SA (ATCC 25923)                                      | --                             | --                 | --                      | --                          |
| PS (ATCC 27853)                                      | --                             | --                 | --                      | --                          |
| Cefixime 5mcg ZEM                                    |                                |                    |                         |                             |
| EC (ATCC 25922)                                      | 19                             | 16-18              | 15                      | 23-27                       |
| SA (ATCC 25923)                                      | --                             | --                 | --                      | --                          |
| PS (ATCC 27853)                                      | --                             | --                 | --                      | --                          |
| Levofloxacin 5mcg LBC                                |                                |                    |                         |                             |
| EC (ATCC 25922)                                      | 17                             | 14-16              | 13                      | 29-37                       |
| SA (ATCC 25923)                                      | 19                             | 16-18              | 15                      | 25-30                       |
| PS (ATCC 27853)                                      | 17                             | 14-16              | 13                      | 19-26                       |
| Ciprofloxacin 5mcg CIP                               |                                |                    |                         |                             |
| EC (ATCC 25922)                                      | 21                             | 16-20              | 15                      | 30-40                       |
| SA (ATCC 25923)                                      | 21                             | 16-20              | 15                      | 22-30                       |
| PS (ATCC 27853)                                      | 21                             | 16-20              | 15                      | 25-33                       |

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|                                 |    |       |    |       |
|---------------------------------|----|-------|----|-------|
| Imipenem/cilastatin 10/10ug IMP |    |       |    |       |
| EC (ATCC 25922)                 | 23 | 20-22 | 19 | 26-32 |
| SA (ATCC 25923)                 | 16 | 14-15 | 13 | --    |
| PS (ATCC 27853)                 | 19 | 16-18 | 15 | 20-28 |
| Cefuroxime 30mcg CXM            |    |       |    |       |
| EC (ATCC 25922)                 | 18 | 15-17 | 14 | 20-26 |
| SA (ATCC 25923)                 | 18 | 15-17 | 14 | 27-35 |
| PS (ATCC 27853)                 | -- | --    | -- | --    |
| Ofloxacin 5mcg OFX              |    |       |    |       |
| EC (ATCC 25922)                 | 16 | 13-15 | 12 | 29-33 |
| SA (ATCC 25923)                 | 18 | 15-17 | 14 | 24-28 |
| PS (ATCC 27853)                 | 16 | 13-15 | 12 | 17-21 |
| Erythromycin 15mcg ERY          |    |       |    |       |
| EC (ATCC 25922)                 | -- | --    | -- | --    |
| SA (ATCC 25923)                 | 23 | 14-22 | 13 | 22-30 |
| PS (ATCC 27853)                 | -- | --    | -- | --    |
| Gentamicin 10 mcg GN            |    |       |    |       |
| EC (ATCC 25922)                 | 15 | 13-14 | 12 | 19-26 |
| SA (ATCC 25923)                 | 15 | 13-14 | 12 | 19-27 |
| PS (ATCC 27853)                 | 15 | 13-14 | 12 | 16-21 |
| Azithromycin 15mcg AZN          |    |       |    |       |
| EC (ATCC 25922)                 | -- | --    | -- | --    |
| SA (ATCC 25923)                 | 18 | 14-17 | 13 | 21-26 |
| PS (ATCC 27853)                 | -- | --    | -- | --    |

**USE:** It is used for antimicrobial sensitivity for relevant test organisms for laboratory diagnosis.

**Precautions:** For Laboratory Use.

**Storage:** -20 to 8°C

**Packing:** 50 Rings Pack

**Disclaimer:**

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