

## Sterile Discs

### Intended Use

Sterile discs can be used for testing antibiotic susceptibility testing by loading antibiotic of choice.

### Principle / Summary

Antimicrobial Susceptibility Testing (AST) is a laboratory procedure performed by laboratory technician to identify, which antimicrobial regimen is specifically effective for individual patients. The introduction of various antimicrobials for treating variety of infections showed the necessity of performing antimicrobial susceptibility testing as a routine procedure in all microbiology laboratories.

The most common method to study antibiotic susceptibility includes the Kirby-Bauer Method. In this method, small discs saturated with antibiotic is placed on the plate containing the bacteria. A zone of inhibition of growth around the disc is observed to study the susceptibility of the microbe to the antibiotic. Sterile discs are used for flexible antibiotic studies. These discs are loaded with an antibiotic of choice and placed on a plate with culture of the organism against which the antibiotic must be tested. It allows studies with a wide variety of selected antibiotics and is compatible with the Kirby-Bauer method to create a measurable zone of inhibition.

### Quality Control

**Appearance:** Blank Filter paper discs of 6mm diameter.

**Cultural response:** Average diameter of zone of inhibition observed on Mueller Hinton Agar for 18-24 hours incubation at 35°C-37°C for standard cultures.

Organism (ATCC)	Standard Diameter of zone of inhibition in mm
<i>Escherichia coli</i> (25922)	No zone of inhibition
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	No zone of inhibition
<i>Pseudomonas aeruginosa</i> Strain Boston 41501 (27853)	No zone of inhibition

**Sterility Test (by Direct Inoculation Method):** No microbial growth is observed after incubating at 30°C-35°C in Fluid Thioglycolate Medium and at 20°C-25°C in Soyabean Casein Digest Medium for more than or equal to 14 days.

### Storage and Shelf-life:

Discs in routine use should be stored at 2°C-8°C. Longer term storage should be at -20°C-8°C.

### References:

1. Bauer, Kirby, Sherris and Turck, 1966, Am. J. Clin. Path., 45: 493
2. Data on file: Microexpress®, A Division of Tulip Diagnostics (P) Ltd.

### Product Presentation:

Cat No.	Product description	Pack Size
206191190250	Antimicrobial Susceptibility Disc	5 Carts (5 x 50 disc)
206191190500	Antimicrobial Susceptibility Disc	5 Vials (5 x 100 disc)
206191190100	Antimicrobial Susceptibility Disc	Single Vial (1 x 100 Disc)

### Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.