

Ceftazidime/Clavulanic Acid Antibiotic Susceptibility Test Discs

Product Number: MC-CTD01-20PCS

Shipping and Storage

1. Drug sensitive paper: Freeze and store under -20°C in a dark sealed manner
2. The shelf life of different drug sensitive paper strips varies.

Description

This product is tested for drug sensitivity using the agar disk diffusion method. Stick the drug sensitive paper onto the solid culture medium inoculated with the bacteria to be tested, and the drugs contained in the drug sensitive paper will dissolve and diffuse around the culture medium, forming an antibacterial ring. The size of the antibacterial diameter is inversely proportional to the minimum inhibitory concentration (MIC) of the antibacterial drug. Therefore, the optimal inhibitory concentration of drugs on bacteria can be determined based on the size of the antibacterial ring. Different bacterial antibiotic sensitive paper sheets contain different types of antibiotics and can also be customized according to customer needs.

Microbial sample source

Pure cultures of microorganisms from human or animal samples.

Protocol

1. Preparation: Take out the drug sensitive paper and set it aside. (There are abbreviations of drug names on the paper)
2. Preparation of bacterial solution: In a biosafety cabinet, directly pick 3-5 fresh pure bacterial colonies from agar medium and suspend them evenly in 3mL of sample diluent (prepared by the customer). Adjust the concentration of the bacterial solution to 0.5 McPherson concentration (approximately 1×10^8 CFU/mL) (compared with the turbidity of a standard 0.5 McPherson concentration tube).
3. Inoculation: Use a sterile cotton swab dipped in a prepared 0.5 M&A bacterial suspension and spread it evenly on MH agar medium. Stick the extracted drug sensitive paper onto the culture medium. Cultivate at 35-37°C and observe the results for 16-24 hours. (The specific temperature and time may vary depending on the strain of bacteria and antibiotics)

Note: Sample addition requires the use of sterile suction tips;

When placing the drug sensitive paper strips on the culture medium, the distance between them should be reasonable (the distance between the paper strips should not be less than 24mm), and the distance from the culture dish should be reasonable (the center of the drug sensitive paper strips should be no less than 15mm from the edge of the petri dish).

After inoculation, apply the drug sensitive paper within 15 minutes;

If a negative sterile control is required, a culture medium without bacterial suspension can be used for testing; Positive control does not use drug sensitive paper, only a uniformly coated bacterial suspension is cultured.

Result analysis and judgment

1. After cultivation, form a bacteriostatic zone around the drug sensitive tablet on the culture medium, measure its diameter, and compare it with the diameter in the quality control range table. A value within the range is the inflection point. If it is greater than the quality control range, it indicates sensitivity, otherwise it indicates resistance.
2. The dosage of medication should be adjusted according to its sensitivity level, with the higher the sensitivity level, the smaller the dosage of medication.
3. There should be no bacterial growth on the negative culture medium; The bacteria grow well on the positive culture medium.

Note

1. When storing this product, the bottle should not be placed upside down or inverted. If the color of the drug sensitive paper

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changes or the desiccant becomes ineffective, it should be discarded.

2. The drug sensitive bottle taken out of the refrigerator should be kept at a constant temperature before opening to prevent the paper from getting damp due to the condensation of hot and cold water.
3. During cultivation, the petri dishes should not be stacked too high to avoid affecting even heating.
4. This product is sterile, please pay attention to aseptic operation.
5. Pay attention to the storage conditions during the product storage process.