β-Lactamase IV

rp216610

Store at 2-8℃ for one year.

Introduction:

Metalloenzymes are water-soluble proteins with recombinant genes. After being lyophilized, they are irradiated with cobalt-60 and then aseptically packaged in vials. They are recombinant gene proteins constructed based on the chemical structures of cephalosporins and carbapenems. The active center of the gene fragment can disrupt the chemical structures of cephalosporin and carbapenem antibiotics, causing them to lose their antibacterial properties after ring opening or chain breaking.

Notes:

1. When conducting the sterility test of antibiotics, use a manual syringe to draw sterile water and inject it into the vial of the drug. Shake it well to dissolve the drug, and then draw out the solution. Add it to a 500 ml solution of 0.9% sodium chloride and shake it well. Do not use the needle on the incubator to dissolve and inject the solution. Avoid high-concentration solutions passing through the filter membrane, which may make it difficult to rinse thoroughly.
2. Here, it is emphasized again: when conducting the sterility test of antibiotics, be sure to use a manual syringe to inject sterile water to dissolve the sample, and then transfer the dissolved sample to a 500 ml solution of 0.9% sodium chloride and shake it well, so as to prevent the sample from having a too high local concentration and causing the situation where it is difficult to rinse thoroughly when passing through the filter membrane.
3. During the sterility test, take 1 bottle of the lyophilized powder of metalloenzyme, add 5 ml of sterile water to dissolve it, and shake it well to make a solution of metalloenzyme. Take 2 ml of the enzyme solution and put it into 1500 ml of the rinsing solution and shake it well. After the rinsing solution has finished rinsing the filter membrane of the incubator, pump out all the solution. Use a manual syringe to pierce into the breathing ports of the three incubators, and add 1 ml of the enzyme solution to each incubator. Try to make the enzyme spread evenly over the entire surface of the filter membrane. Let it stand for 10 minutes to ensure that the high-concentration enzyme fully contacts the filter membrane of the incubator, so as to destroy (neutralize, inactivate) the remaining cephalosporins and carbapenems on the filter membrane. Then pump in the corresponding culture medium and shake it well. Add 1 ml of Escherichia coli (100 CFU/ml) to the positive control tube.
4. Adding 1 ml of the solution of metalloenzyme to each of the three incubators can remove the antibacterial properties of the small amounts of cephalosporins and carbapenems

remaining on the inner wall of the incubator and the surface of the filter membrane.

5. Gently shake the positive control tube once in the morning and once in the afternoon every day.
6. Customers can conduct methodological verification according to the above methods, or conduct verification according to the actual operation situation.
7. The specification is 5 million u per bottle. It is aseptically negative and can be stored in a refrigerator at 2~10°C.