

To create bacteria-specific media, add 7 grams of Nutrient Agar to a bottle and mix with 250 ml of distilled water using a cylinder. After we completed the sterilization process inside the hood, we took a section of the afflicted branch and trimmed it to a size of 5 cm so that we could easily control it. After cutting and prepping it, we place it in a tissue and spray it with 70% ethanol to sanitize the exterior layer. After sterilizing it, we began peeling the outer layer of the olive knot, and after removing the outer layer, we cut the tuber into small pieces with a scalpel and placed them inside small knots, which we filled with 100 ml of distilled water using a pipette, and we waited half an hour. We ensure that the pipet is thoroughly drained of air before writing the name of the primer and its concentration on the Eppendorf tubes. After the media is ready, we sterilize the hood by spraying it with 70% ethanol, cleaning it with a tissue, then adding 100% ethanol to disinfect the equipment we used, and turning on a flame to aid in the sterilization process. After waiting for half an hour, we begin extracting samples with the ring and growing them inside the Petri dishes by inserting them in little tubes and moving them over the media inside the Petri dishes softly so as not to destroy a layer of the media. The Polymerase Chain Reaction (PCR) Test is an assay in which tiny pieces of deoxyribonucleic acid or RNA are amplified to aid in the study of... The PCR test detects RNA from the disease-causing organism, aberrant cells in the sample, or genetic alterations in the sample's cells. We dilute it tenfold, because every 90 microns of nuclease-free water takes 10 microns of IAALR Plumer. We placed an autoclave tip with green lines on it. The purpose of these lines is to indicate when the sterilization will conclude and that it has been done successfully by turning black. Before placing the bottle in the autoclave, we put the name and date on the strip and ensure that the bottle's lid is half closed to prevent it from exploding due to pressure. Most viruses and other diseases contain DNA or RNA, which contains genetic information for cells. Preparing samples for PCR testing: After successfully isolating and growing bacteria, we tested their presence using a PCR equipment. After prepping the samples, we place them in the PCR machine for two hours, but first we ensure that there are no air bubbles (for accuracy). The autoclave sterilizes the media for bacteria in 15 minutes, reaching a temperature of 121 degrees Celsius. After the sterilization process is complete, we pour the media into the Petri Dishes and wait until it is virtually solid (close to gel), which takes about half an hour or more. We prepare three Eppendorf sterilizer tubes and place 100% IAALR inside. We extract 90 microns of water and place it in Eppendorf tubes. We prepare four distinct samples and apply PCR mix to them, with the exception of one in which we do not use DNA and instead add 1 ml of water. Even in samples with little amounts of DNA, numerous copies can be made in a matter of hours. After that, we placed the media in the autoclave and added a stirrer to the media solution. After it reaches this temperature, we wait until it begins to cool to 70 degrees Celsius (which normally takes half an hour or more). A short strand of DNA or RNA. Then we close it and record the sample's location and date of isolation. We dilute them 9:1.