



12-WELL TISSUE DISAGGREGATOR

Catalog No. F37844-0000

Patent Pending

The Scienceware® 12-Well Tissue Disaggregator allows quick processing of tissue pieces and organs to produce isolated cell suspensions, collecting them in the individual wells of a standard 12-well culture plate. The 12-Well Tissue Disaggregator is made from a FDA-approved grade of TPX® (polymethylpentene) resin, providing a crystal-clear structure with excellent chemical-resistant properties. Permanently affixed 70 mesh, stainless steel screens have a 0.0037" (0.094mm) wire diameter and an opening size of 0.0106 square inch (0.269 square mm).

STERILIZING PROCEDURE:

For sterile applications the Scienceware® 12-well Tissue Disaggregator can be autoclaved using the stainless steel autoclaving fixture included in this set. The autoclaving fixture is designed to maintain the shape of the 12-Well Tissue Disaggregator during the extreme temperatures of autoclaving processes. Failure to use the autoclaving fixture during autoclaving can result in the 12-well Tissue Disaggregator losing its shape and may impact its ability to fit properly onto 12-well culture plates.

1. Turn-over the tissue disaggregator to reveal the underside.
2. Insert the autoclave fixture (included) into the cavity on the underside of the tissue disaggregator.
3. Wrap the disaggregator in aluminum foil or alternate, suitable autoclavable barrier.
4. Lay the disaggregator in the autoclave so that the fixture will not fall out during or after autoclaving.
5. Perform desired autoclave sequence.
6. Allow disaggregator and fixture to cool to room temperature.
7. Working under sterile hood, remove autoclave barrier and pull the fixture out from the underside of the disaggregator and follow the INSTRUCTIONS FOR USE below.

NON-STERILE PROCEDURE:

Many applications, including immediate flow cytometry analysis, do not require the maintenance of sterile conditions. If the cell isolates obtained from processing with the 12-Well Tissue Disaggregator do not need to be sterile, then simply follow the INSTRUCTIONS FOR USE below.

INSTRUCTIONS FOR USE:

1. Remove the lid from a standard 12-well culture plate.
2. Overlay the tissue disaggregator onto the culture plate. For a proper fit, be sure to match the orientation marks on the culture plate to those on the tissue disaggregator.
3. Add 3 to 5 ml of desired buffer solution to each well that will receive a tissue sample for processing (be sure to use sterile buffer solution if maintaining sterile conditions).
4. Place a small piece of soft tissue (e.g. spleen, lymph nodes, kidney, brain, etc.) into each well so that it is contained in the buffer solution.
5. The organ structure of the tissues can be disrupted by pressing them through the mesh screen at the bottom of each tissue disaggregator well. Almost any suitable, pestle-like item, including syringe plungers, glass pestles, etc., can be used to press the tissues through the mesh screen (be sure to use a sterilized pestle if maintaining sterile conditions). For best results, vary the angle and direction of the pestle each time it passes over the tissue sample.
6. Slightly raise the tissue disaggregator straight up from the culture plate, but do not completely separate from the culture plate. Use 1 to 2ml fresh buffer solution to give each well a final rinse to dislodge any cells adhering to the mesh screens.
7. The cell isolates are now contained in the individual wells of the culture plate.
8. Completely remove the tissue disaggregator from the culture plate and return the lid to the culture plate.

CLEANING:

The tissue disaggregator and fixture can be cleaned by soaking in a warm, 1% aqueous solution of Aquet® Detergent (F17094-0020). A soft bristle brush may be used as needed to gently scrub the screens to remove fibrous tissue remains. Temporary contact with bleach (sodium hypochlorite) is acceptable, however, be sure to rinse with deionized water to remove the bleach. Please note that extended contact with bleach will eventually oxidize the screens and the fixture.

