

PRODUCT DESCRIPTION

HoloLid has been especially designed for the HoloMonitor® time-lapse cytometer to eliminate image disturbances caused by surface vibrations and condensation inside the cell culture vessel. HoloLid (cat. # 71120) is air vented and fits Sarstedt 6-well plates (cat. # 83.3920). Sarstedt vessels achieve excellent image quality. However, plastic has a polarizing effect on light, which on rare occasions causes disturbance and reduces image quality. In that case there is nothing that can improve image quality, and the bad well must be discarded. HoloLid can be reused at least 10 times. However, after extensive use the repeated sterilization will noticeably degrade the optical quality of the lid.



HoloLid placed in a Sarstedt 6-well plate (left). The areas marked blue are the observation windows which are immersed into the cell media (right).

MATERIAL

HoloLid is made of poly methyl methacrylate (PMMA or Plexiglas). PMMA is a non-toxic material often used in medical surgery implants, dentures etc. It does not contain Bisphenol-A; a cell disturbing agent commonly present in plastics.

HoloLid is shipped with a plastic cover that must be peeled off before use. It is recommended to sterilized HoloLid before use.

STERILIZING

1. Place HoloLid into a cleansing bath with warm water and detergent for at least 10 minutes.
2. Rinse in multiple steps with tap water first and ultra-pure water last.
3. Place HoloLid into a bath with 70 % non-denatured ethanol inside the sterile bench for 15 minutes. It is important to keep the ethanol bath as short as possible, as ethanol affects the optical quality of the plastic. Handle HoloLid with sterile tweezers and store in a sterile fashion until used; a square Petri dish of 100 × 100 mm is recommended.

USAGE

All steps below are to be handled with standard sterile procedures.

1. Seed the cells. A working volume of 3 ml for each well is recommended. The volume is adjusted to reach a surface level that allows the observation window to be immersed. Remember to take into account that the volume of the treatment adds to the final working volume.
2. Put on the standard lid.
3. Let the cells adhere in the incubator for 1-5 hours, depending on the required adherence time for the specific cells used. This step is performed to avoid uneven distribution of cells. If a reagent is to be added one day after seeding, it is recommended to change lids after the addition.
4. Replace the standard lid with HoloLid. Make sure there is no air between the medium surface and the observation window. If there is an air bubble, carefully tilt the vessel slightly until the bubble is removed.
5. The sample is ready to be used.