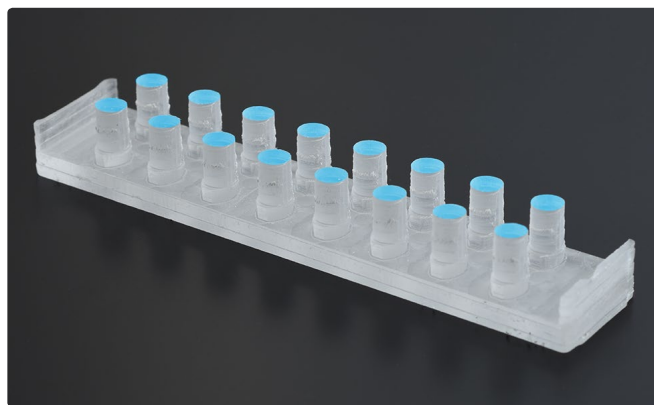


PRODUCT DESCRIPTION

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. # 71140) is designed to fit Sarstedt lumox® multiwell 96 plate (cat. # 94.6000.024) with an ultra-thin gas permeable membrane, which allows for a good gas exchange and excellent image quality. As no further ventilation is necessary, the size of the imaging area has been maximized. 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 lumox® multiwell 96 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 170 µl 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 are no air bubbles in the cell media before changing the lids. If there is an air bubble it can be removed by blowing a little puff of clean air onto the bubble which will burst. Clean air can be created using an ethanol dispensing bottle with a little ethanol inside and the inner tube removed. Press the bottle carefully while targeting the bubble with its tip.
5. The sample is ready to be used.