

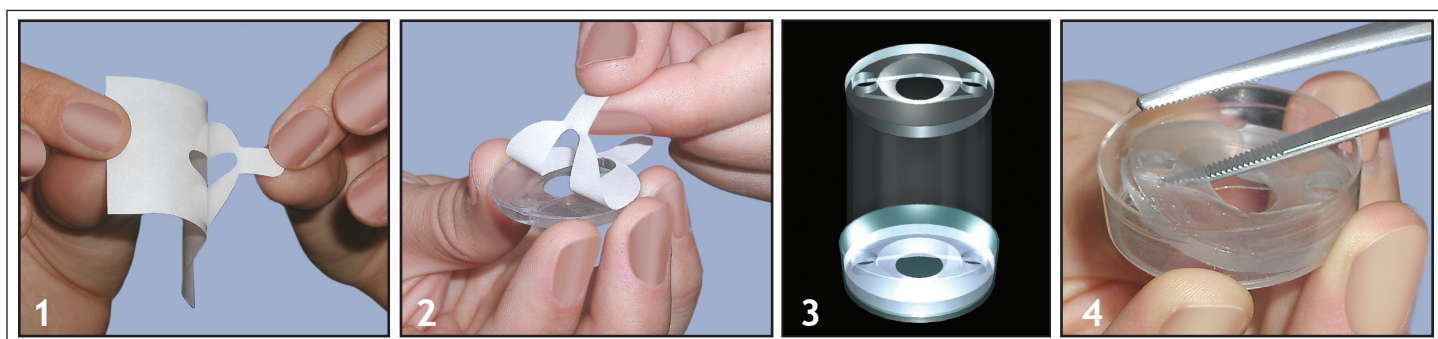
Examples of PDI use inside a microscope heating stage in combination with perfusion

# Petri dish insert PDI

Petri Dish Insert is designed to facilitate solution exchange inside standard culture dishes. This flexible silicone chamber fits most Petri dishes. The insert ships along with self-adhesive gaskets, which form airtight and leak-proof contact with the bottom of the dish, even if the dish is filled with media and if you use plastic dishes with uneven surface on the bottom. This effectively eliminates substance trap and contamination during media exchange. The standard configuration has a laminar cutout to provide fast solution exchange inside the dish without bubbles entering the working volume.

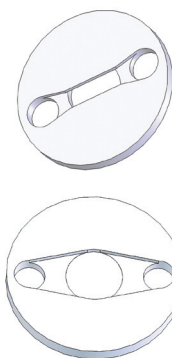
We provide Custom Designed inserts with solution flow profiles specific to your application requests, including closed configurations to form defined shear stress to the samples on slides or coverslips.

Catalog #	Features:
PDI	Silicone insert with laminar profile for solution flow. Separate inflow and outflow compartments to prevent bubbles from entering the working volume. Includes pack of 50 self-adhesive gaskets. Fits 35 and 50mm dishes.
volume	min 100 $\mu$ l
height	3 mm
clearance	11 mm, conical cutout in the center to provide easy access to the sample



## Instructions for using Petri Dish Inserts - PDI, LPPCP1

1. Pull the tab to release the adhesive layer from the protective liner.
2. Align the adhesive along the flow cutout on the bottom of the insert, and remove the remaining protective liner by carefully pulling the tabs.
3. Put the insert inside the dish. **If the dish is filled with liquid media, press the insert firmly down for at least 10sec.** Position perfusion accessories inside inflow and outflow compartments to form solution flow.
4. After the experiment, use forceps or any other appropriate tool to remove the insert from the dish by pushing the tool under the insert and gently pulling it up.



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## Instructions for LPPCP1 systems

1. First, release the gasket from the protective liner, by pulling one of the tabs. Second, align the gasket with opening on the bottom of the silicone insert. Attach the gasket to the insert by pressing along the surface of the gasket. Third, remove the remaining protective liner by pulling one of the tabs, while making sure the adhesive remains attached to the insert. Separating a little bit of the adhesive from the protective liner with tweezers might help this procedure. Put the insert inside a dish, make sure the adhesive faces bottom of the dish.

If patch clamping, remove any grease from the surface of the working volume with a small piece of filter paper. The reference electrode or Agar bridge should be positioned inside inflow compartment.

2. Connect outflow unit CFPS-1U66 to the suction tubing. Position the metal suction tubing inside one of the openings in the chamber (without reference electrodes or other probes). The suction tubing should not touch the walls of the insert or any other surfaces (electrodes, for example). Otherwise you can suck all solution through surface tension.

3. Insert the inflow manifold into the magnetic holder. Position inflow tubing into another opening in the holder's ball-joint. Turn ON perfusion and adjust the height of suction tubing if necessary.

4. In order to remove the insert, use tweezers to gently pull one side of the insert up.

5. The stainless microscope adapter will also fit 50mm glass bottom sterile dishes. PDI insert will fit inside 50mm dishes with 40mm optical clearance.

6. The provided clamps can be used to fix the dish firmly in place, which might be useful if oil immersion objectives are used with inverted microscopes, for example.