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EZ-Taxiscan

Materials:
1. RPMI culture media.
2. Chemoattractant solution: 200 nM fMLP in RMPI culture media.

Method:
1. Place “40 Glass” (41 Glass is used in conjunction with a #1.5 coverslip) in holder base. Fill with 3 ml of culture media, place small “o” ring beneath wafer housing, and add wafer housing into holder base. Place large “o” ring on top of wafer housing. Gently close inner lever.
2. Place **EZ-TAXIScan** chip gently into wafer housing with forceps. Chip should fit snuggly on top of glass and between wafer holder (see Note 18). Place rubber gasket (to protect chip) beneath the wafer clamp and place wafer clamp on wafer housing. Gently close outer lever.
3. Place assembled device on top of preheated **EZ-TAXIS** microscope (Fig. 5, A and B).
4. Using syringe guide, add 1 ul of cells to lower chamber using microsyringe (*MS-E10MIC*, Exmire). Use a plastic pipette to draw cells into imaging surface.
5. Add 1 ul of 100 nM – 1 uM chemoattractant to upper chamber. Begin image acquisition immediately (Fig. 5C).

Figure 5

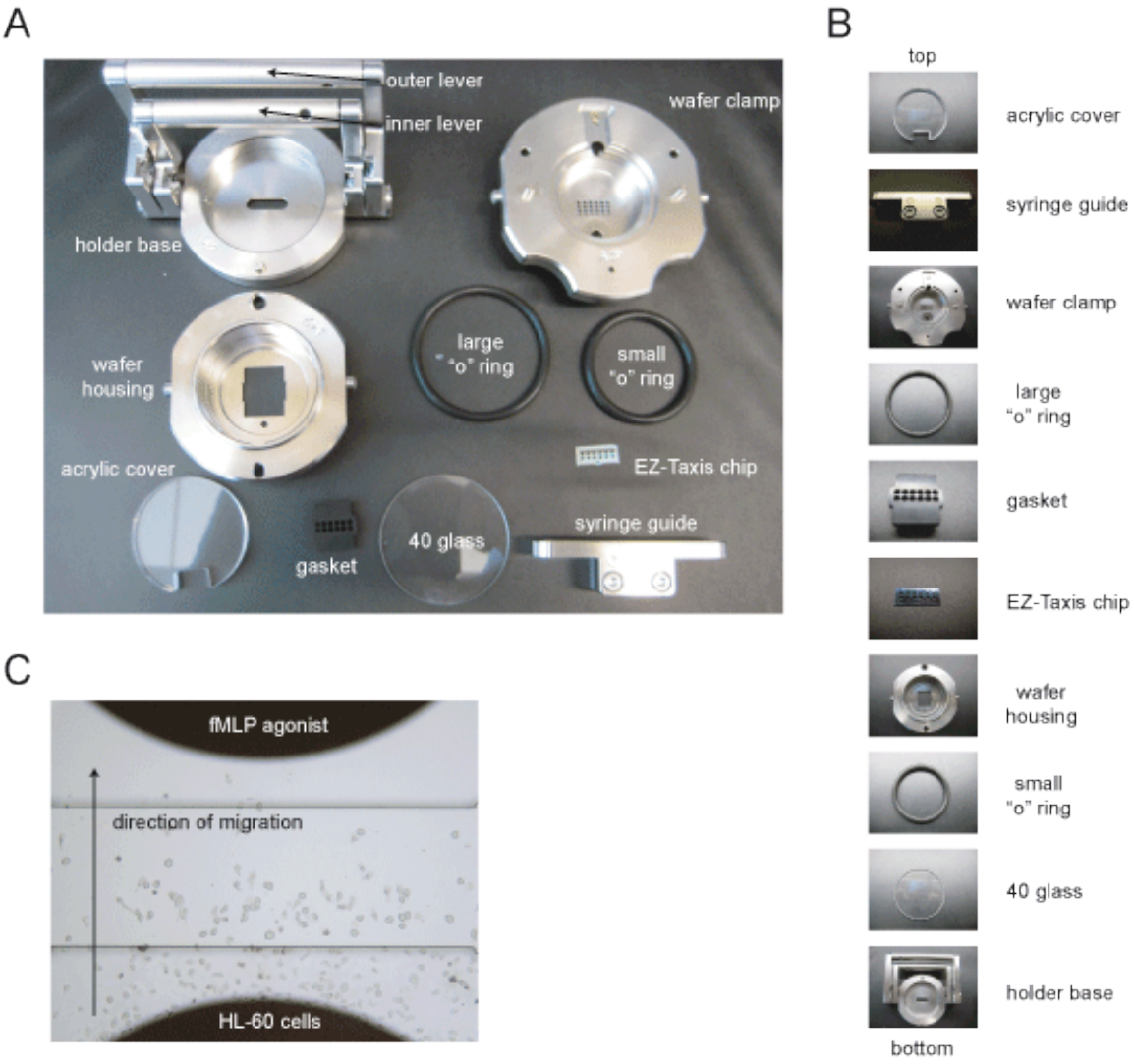

Fig. 5. The components of the **EZ-TAXIS** system are shown in (a) with the individual components in their order of assembly from top to bottom shown in (b). (C) An example of **HL-60** cells migrating toward chemoattractant in the **EZ-TAXIS** assay visualized with brightfield microscopy.

Addendum February 20, 2009 by Arthur Millius

There is no need to sonicate all the parts of the EZ Taxis. You only need to vortex the chip for 30 seconds to get the device completely clean.