**Fig S1:** A: Side (left) and bottom (right) view of the μ-slide, with channel dimensions, working volume and points of measurement (3 per channel) shown. B: Transmission images of MEF cells in μ-slide at two seeding densities during the attachment phase (0-3 h).
**Fig. S2.** Effects of additional O$_2$ barrier (glass coated bottom) on respiration profiles of MEF cells. **A.** Resting cells measured in standard μ-slide (Plastic) and with additional glass cover slip attached to the bottom (Glass). **B.** Resting and stimulated (10 μM AntA, 1 μM FCCP/10 μM OM) MEF cells measured in standard plastic and glass-bottom 96WP.