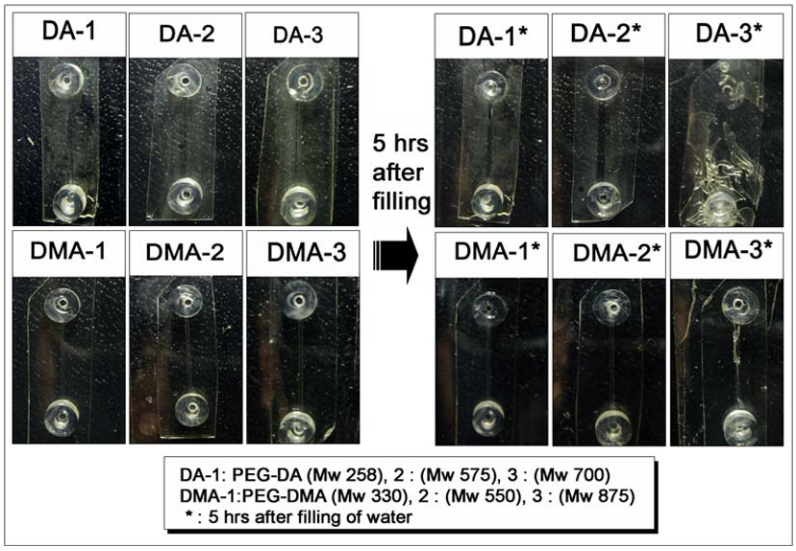

Fig. S1. Photographs showing the stability of various PEG microchannels under continuous contact with water for 5 hrs. Note that high Mw PEGs such as PEG-DA (Mw = 700) and PEG-DMA (Mw = 875) are prone to swelling and subsequent detachment.

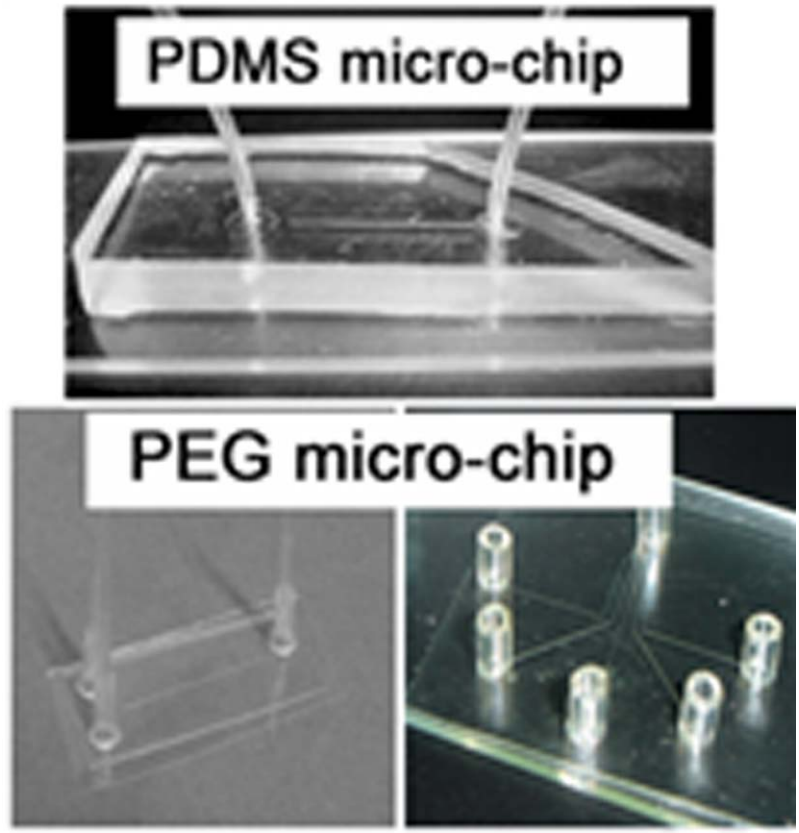

Fig. S2. Photographs showing completed PEG microchannel devices on PET film (bottom, left) and glass substrate (bottom, right), respectively. The devices resemble a standard PDMS microchannel device (top). The fabrication of the PEG device was similar to that of the PDMS device with one notable exception that holes were punched through a composite layer consisting of a PEG and a supporting PET layer to make reservoirs prior to attaching to a flexible or a solid substrate coated with a thin PEG layer (~20 μm).