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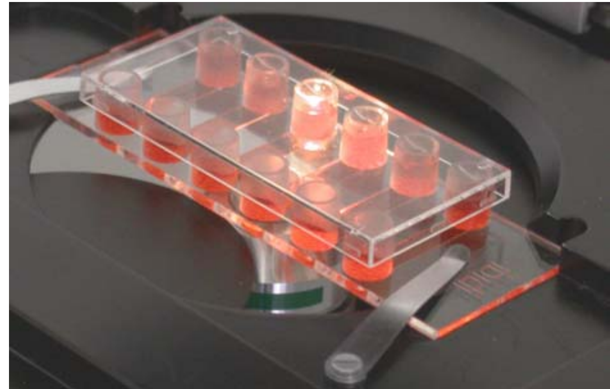
BioDiagnostics

Trypsinization of adherent cells using µ-Slide VI

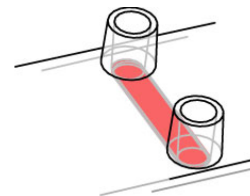
In this application note we show how to remove adherent growing cells from a µ-Slide VI after cultivation.

First, grow your cells to the desired degree of confluence.



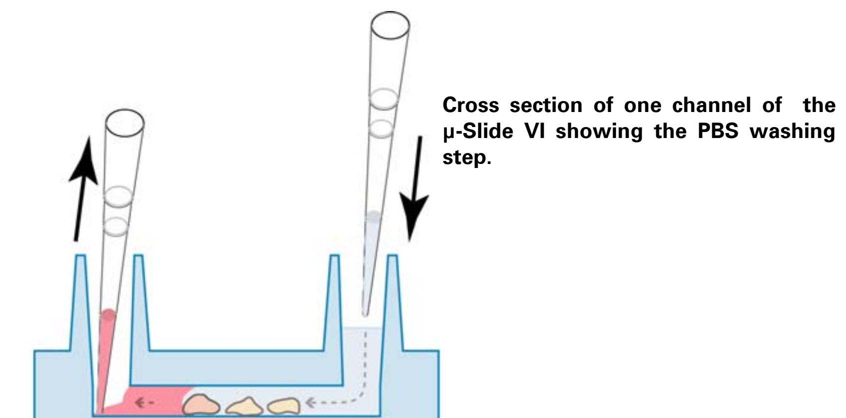
A µ-Slide VI filled with cells and medium.

Remove the culture medium from the reservoirs of the µ-Slide VI. Do not aspirate the entire channel volume.



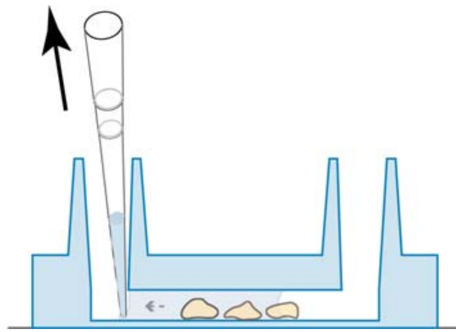
One channel of µ-Slide VI with empty reservoirs.

Then wash with PBS (200 µl per channel) and aspirate from the opposite end as illustrated below. We recommend to use a cell culture aspirator and a pipette at the same time. Use the tip of the aspirator and the pipet as illustrated below.



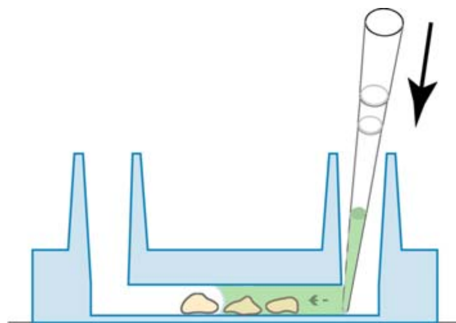
Cross section of one channel of the µ-Slide VI showing the PBS washing step.

Aspirate the entire PBS from the channel by using the cell culture aspirator.



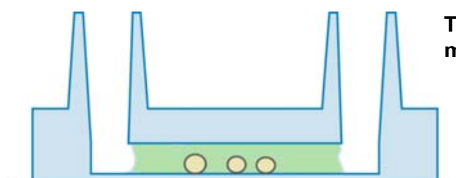
In this step PBS is removed completely from the reservoirs and the channel.

Refill the channel with 30 µl of your detachment solution (e.g. Trypsin/EDTA) right away. Put the pipet tip directly on the channel's inlet as shown below.



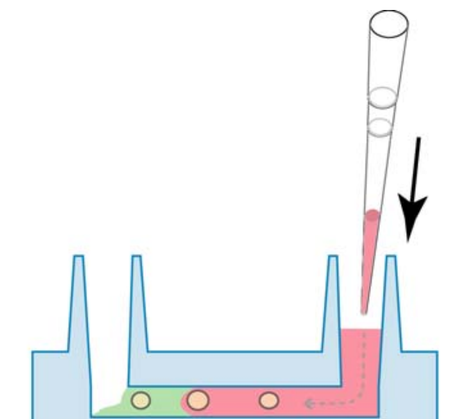
30 µl of detachment solution is filled into the empty channel.

Put your cells into the incubator. Due to the different aspect ratio of growth area and volume, the detachment process might take longer than usual (~2-3 min). Control cell detachment with the phase contrast microscope. If no detachment occurs, increase the concentration of your detachment solution or use a longer incubation time.



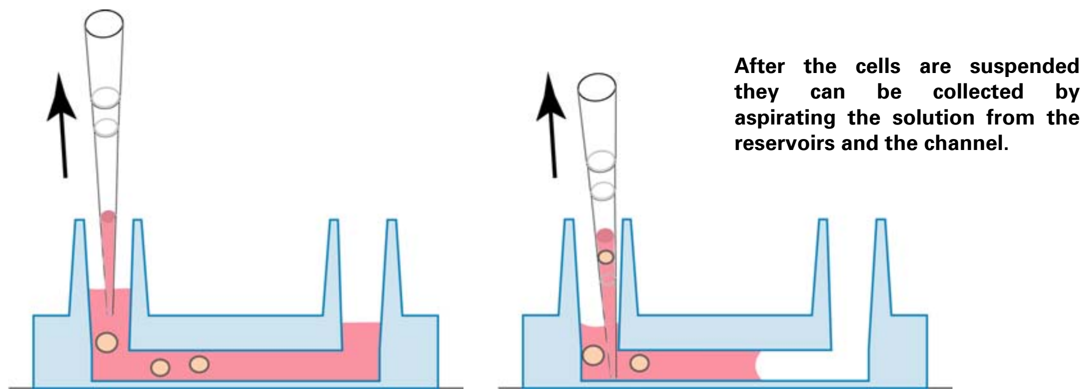
The cells will detach after some minutes.

After cells become roundish and detached, flush each channel with 100 µl medium.



The detached cells are flushed out of the channel by 100 µl fresh medium.

Take out the cell suspension from the opposite end of the channel. In case there are some cells left, repeat the flushing step.



Collect the suspended cells and remove/dilute the detachment solution. Process your cells further as desired.