- 4. incubate at 30°C for 120 minutes in thermocycler with heated lid
- 5. keep at $+4^{\circ}$ C until used
- 6. microcentrifuge at 14'000g for 10 minutes prior to running on the MITOMI chip so that to prevent clotting of the channels by particles of lysate

Protocol for Klenow extension:

- 1. for each Klenow extension reaction prepare the following mix in 20μ L volume taking target oligo in excess so that the final concentration of double-stranded labeled targets is determined by the concentration of primer making it 10μ M after annealing step and 6.67μ M after extension step:
 - $0.4\mu L 500\mu M$ complement primer
 - 2μ L NEBuffer 2 (10x)
 - $0.6\mu L 500\mu M$ target oligos
 - $17\mu L$ mQ water to $20\mu L$
- 2. run the annealing program in thermocycler with heated lid:
 - I. 98°C, 4 minutes ramp 10%
 - II. 37°C, 3 minutes
 - III. 4°C, hold
- 3. prepare extension mix and add 10μ L of it to the result of each annealing reactions:
 - $0.5\mu L$ Klenow (exo-) enzyme
 - $1\mu L$ NEBuffer 2 (10x)
 - $3\mu L 10\mu M dNTP mix$
 - $5.5\mu L$ mQ water to $10\mu L$
- 4. run polymerisation program in thermocycler with heated lid:
 - I. 37°C, 90 minutes ramp 10%
 - II. 80° C, 25 minutes ramp 100%
 - III. 30°C, 4 minutes ramp 10%
 - IV. 4°C, 1 minute ramp 10%
 - V. 4°C, hold