4. incubate at 30°C for 120 minutes in thermocycler with heated lid
5. keep at +4°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 20μL 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 10μM after annealing step and 6.67μM after extension step:
   - 0.4μL 500μM complement primer
   - 2μL NEBuffer 2 (10x)
   - 0.6μL 500μM target oligos
   - 17μL mQ water to 20μL
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 10μL of it to the result of each annealing reactions:
   - 0.5μL Klenow (exo-) enzyme
   - 1μL NEBuffer 2 (10x)
   - 3μL 10mM dNTP mix
   - 5.5μL mQ water to 10μL
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