

**Method S4. Reamplification of primary MSE-PCR products according to Geigl *et al.* 2007 [42]**

Reagents:

- Buffer 2 (Roche, 11681 842001)
- dNTP Set, 10 mM (New England Biolabs, N0447)
- *Taq*Polymerase (5 U/ $\mu$ l) + 50 mM MgCl<sub>2</sub> (Invitrogen, 18038-026)
- LIB1 (5'-AGTGGATTCTGCTGTCAGT-3')
  
- Mastermix:
  - 5.0  $\mu$ l Buffer 2
  - 2.0  $\mu$ l 5 mM dNTPs
  - 2.25  $\mu$ l MgCl<sub>2</sub>
  - 2.0  $\mu$ l LIB1
  - 0.5  $\mu$ l *Taq*Polymerase
  
- Add 2  $\mu$ l primary PCR product to the mastermix
- Thermal Cycler program:
  - 95°C 10 min
  - 95°C 30 sec
  - 50°C 30 sec } 45 x
  - 72°C 2 min
  - 72°C 7 min
  
- Store PCR products at -20°C