

Method S5. Whole genome amplification of single cell DNA using the Single Cell WGA Kit (WGAN, New England Biolabs, E2620S/L)

Isolation of single cells :

- Coat the bottom of a petri dish with FCS, dilute cell suspensions with 1x PBS to achieve a density of one cell per visual field under an inverse microscope with 100x magnification
- Use 1 μ l pipette to isolate a single cell
- Transfer single cell into 4 μ l Cell Extraction Buffer

Whole genome amplification:

- Add 5 μ l Extraction Cocktail to each cell and incubate for 10 min at 75°C and 4 min at 95°C in a thermal cycler
- Transfer cells on ice and add 5 μ l Pre-Amp Cocktail to each cell
- Pre-amplification is performed with the following thermal cycler program:

95°C for 2 min
95°C for 15 sec
15°C for 50 sec
25°C for 40 sec
35°C for 30 sec
65°C for 40 sec
75°C for 40 sec } 12 x

- Place samples on ice
- Add 60 μ l Amplification Cocktail to the 15 μ l pre-amplification product
- Amplification is performed with the following thermal cycler program:

95°C for 2 min
95°C for 15 sec
65°C for 1 min
75°C for 1 min } 14 x

- Store PCR products at -20°C