

Single Cell WGA Kit

Single-cell whole genome amplification

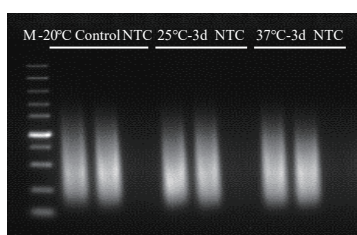
Advantage

- **Room temperature transportation:** The single cells selected can be placed under $\leq 37^{\circ}\text{C}$ for transportation and preservation after simple treatment.
- **Simple operation and high sensitivity:** Single cell or 15pg total DNA can be used as the starting template. Only takes 3 h to amplify.
- **Uniformity:** Suitable for copy number variation analysis of chromosomes exceeding 4Mb.
- **Accurate analysis:** Capable of high reproducibility and accuracy in single nucleotide variation analysis (SNV) and copy number variation analysis (CNV).

Product Performance

Agarose Gel Image & Concentration

Amplification was conducted using CoWin's Single Cell WGA Kit for samples stored at -20°C , cell lysates stored at 25°C for 3 days, and cell lysates stored at 37°C for 3 days.



No.	Name	Concentration (60 μl) ng/ μl
1	-20°C Control 1	68.8
2	-20°C Control 2	66.6
3	-20°C NTC	3.62
4	25°C 3d 1	68
5	25°C 3d 2	66.6
6	25°C 3d NTC	3.52
7	37°C 3d 1	61.8
8	37°C 3d 2	57.8
9	37°C 3d NTC	3.06

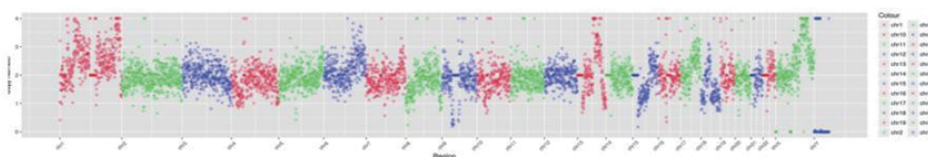
Conclusion: Storage at different temperatures does not affect the yield of single-cell whole genome amplification.

NGS Result

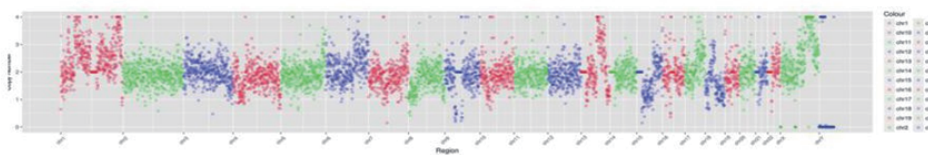
The products were amplified with gDNA and single cells of tumor cells as templates. The database was built with CWBIO library preparation kit. The copy number variation was analyzed by MGI. Compared with company B, the data analysis is as follows:

SampleID	raw_data	Q30	R1_gc	R2_gc	reads number	mapped	rmdup	perfect
gDNA template, CW-1	1935700200(1.94G)	86.54%	42.77%	42.05%	18458220	92.45%	99.05%	80.67%
gDNA template, CW-2	1237126600(1.24G)	87.19%	42.14%	42.19%	11792100	93.83%	99.26%	81.84%
gDNA template, B	2076679800(2.08G)	87.20%	42.04%	42.26%	19732120	93.45%	98.90%	77.88%
cell template, CW-1	1881487200(1.88G)	86.89%	41.82%	42.09%	18006210	93.88%	98.69%	81.70%
cell template, CW-2	2022866400(2.02G)	87.39%	41.92%	42.24%	19319880	94.03%	98.81%	81.73%
cell template, B	1307065400(1.31G)	87.48%	41.55%	41.73%	12466744	94.32%	98.85%	81.31%

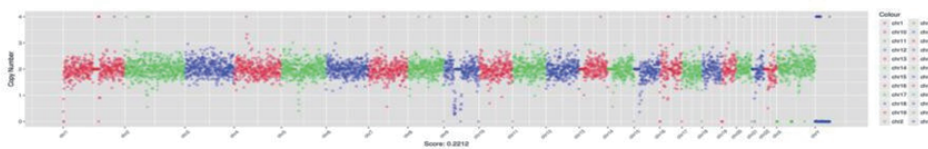
Copy number
analysis of
company B's kit



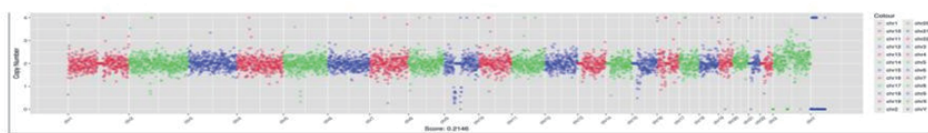
Copy number
analysis of
CoWin's kit



Company B's
amplification
reagent



CoWin's
amplification
reagent



Conclusion: Compared with similar products, Single Cell WGA Kit can meet the requirements of detecting the insertion or deletion of fragments > 4 Mb, which has high reproducibility and accuracy.

Product Information

Cat. No.	Name	Specification	Keyword
CW2844S	Single Cell WGA Kit	24rxns	Single-cell whole genome amplification
CW2844M		96rxns	