

SW620 cells STR report

Method: An appropriate amount of SW620 cells (Cell number PC-H2024010814, 1×10^6) were used TIAamp Genomic DNA Kit to extract DNA, 20 STR loci and gender identification loci were amplified by Microreader™21 ID System, PCR product detection was performed by GenReader 7010 genetic analyzer, detection results were analyzed by GeneMapper Software6 (Applied Biosystems), and compared with ExPASy databases.

Experimental result:

1. The results of negative and positive control were correct.
2. The genotyping results of STR locus of SW620 cell line is shown in the following table.

Conclusion:

1. The genomic DNA of SW620 cell line is clear and the result of genotyping is good.
2. The results of STR typing showed that no cross contamination of human cell was found in the cell line of SW620 cell line.
3. The DNA typing of the cell line was 100.00% matched with the cell type in the cell bank, and the cell line name was SW620 .

Appendix I: The genotyping results of STR locus of SW620 cell line.

STR Loci	Sample: PC-H2024010814	Database: SW620
Amelogenin	X	X
CSF1PO	13,14	13,14
D2S1338	17,24	17,24
D3S1358	16	16
D5S818	13	13
D7S820	8,9	8,9
D8S1179	13	13
D13S317	12	12
D16S539	9,13	9,13
D18S51	13	13
D19S433	13	13
D21S11	30,30.2	30,30.2
FGA	24	24
PentaD	9,15	9,15
PentaE	10	10
TH01	8	8
TPOX	11	11
vWA	16	16
D6S1043	11,12	11,12
D12S391	17	17
D2S441	10,15	10,15
The ExPASy database has a matching rate of 100.00%, The number of matched bits is 20 (https://web.expasy.org/cellosaurus-str-search/)		

Note:

1. According to the cell STR identification standard established by the International Cell Line Authentication Committee (ICLAC), when the matching degree of cell lines is $\geq 80\%$, they are considered to be correlated, that is, derived from common ancestral cells; The matching degree is between 55% and 80%, and the correlation needs to be further verified. Less than 55% indicates no correlation between the two.
2. The effective peak of the map was the real PCR band; Small peaks and nonspecific bands were ignored in the calculation.

Appendix II: The genotyping results of STR locus of SW620 cell line.

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GeneMapper Software 6

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