

U-87 MG cells STR report

Method: An appropriate amount of U-87 MG cells (Cell number PC84, 1×10^6) was used to extract DNA, 20 STR loci and gender identification loci were amplified by 21 CELLID System, PCR product detection was performed by ABI3130x1 genetic analyzer, detection results were analyzed by GeneMapper IDX software (Applied Biosystems), and compared with ATCC, DSMZ, JCRB, Cellosaurus and other databases.

Experimental result:

1. The results of negative and positive control were correct.
2. The genotyping results of STR locus of U-87 MG cell line are shown in the following table.

Conclusion:

1. The genomic DNA of U-87 MG cell line is clear and the result of genotyping is good.
2. The results of STR typing showed that no cross contamination of mouse cells and human cells was found in the cell line of U-87 MG 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 U-87 MG.

Appendix I: The genotyping results of STR locus of U-87 MG cell line

STR Loci	Sample: PC84	Database: U-87 MG
Amelogenin	X	X
CSF1PO	10,11	10,11
D2S1338	20,23	20,23
D3S1358	16,17	16,17
D5S818	11,12	11,12
D7S820	8,9	8,9
D8S1179	10,11	10,11
D13S317	8,11	8,11
D16S539	12	12
D18S51	13	13
D19S433	15,15.2	15,15.2
D21S11	28,32.2	28,32.2
FGA	18,24	18,24
PentaD	9,14	9,14
PentaE	7,14	7,14
TH01	9.3	9.3
TPOX	8	8
vWA	15,17	15,17
D1S1656	15	
D6S1043	11,18	
D12S391	18,21	
D2S411		
The Cellosaurus database has a matching rate of 100.00%, The number of matched bits is 17 (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 III: The genotyping results of STR locus of U-87 MG cell line

AB Applied Biosystems
GeneMapper Software 5

PC84

