

SHANGHAI SAILY BIOTECHNOLOGIES Co., Ltd.

Cell Line Authentication – STR Profiling

Sample Type: Cell Line

Sample from: Central South University

Testing Method: STR Genotyping

Report Time: August 14, 2018

COMPANY STATEMENT

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Cell Line Authentication – STR Profiling Report

Sample code:

Table 1. Sample Code

| Customer’s code | Company Code |
|-----------------|--------------|
| Hep-3B | 20180727-01 |

Sample Number: 1

Sample Type: Cell line

Testing Type: STR

Sample From:

Central South University

Testing Method:

DNA was extracted by a DNA extraction kit from Axygen, and amplified by 20-STR amplification protocol. The STR locus and sex gene Amelogenin of the DNA were detected on the ABI 3730XL genetic analyzer.

Test Results:

1. Result

Table 2. Matching information on the cell lines

| Sample Code | Multi-allele | Cell line matched | Cell Bank | EV | Result |
|-------------|--------------|-------------------|-----------|------|-------------------|
| 20180727-01 | No | Hep-3B | DSMZ | 0.94 | Basically Matched |

- Multi-allele means some STR contain more than two loci.
- The cell typing results of this test are good.

2. Sample Description

20180727-01: The DNA typing of the cell lines found to **basically match** the type of cell lines in a cell line retrieval. DSMZ database shows that the cells called **Hep-3B**, corresponding to the cell number **93. No multiple alleles** were found in this cell line.

Note: The cell lines to be tested compared with the cell line STR data collected in ATCC, DSMZ, JCRB, RIKEN database, and the cell lines not included in those cell banks can not be matched.

3. Genotyping Result

Table 3. STR and Amelogenin Genotyping Results of Cell line 20180727-01

| Marker | Sample | | | Cell Bank information | | |
|---------|---------|---------|---------|-----------------------|---------|---------|
| | Allele1 | Allele2 | Allele3 | Allele1 | Allele2 | Allele3 |
| D5S818 | 13 | 13 | | 13 | 13 | |
| D13S317 | 12 | 14 | | 12 | 14 | |
| D7S820 | 8 | 8 | | 8 | 10 | |
| D16S539 | 10 | 10 | | 10 | 10 | |
| VWA | 17 | 17 | | 17 | 17 | |
| TH01 | 6 | 7 | | 6 | 7 | |
| AMEL | X | X | | X | X | |
| TPOX | 9 | 9 | | 9 | 9 | |
| CSF1PO | 8 | 8 | | 8 | 8 | |
| D12S391 | 17 | 17 | | | | |
| FGA | 18 | 18 | | | | |
| D2S1338 | 21 | 25 | | | | |
| D21S11 | 30 | 31 | | | | |
| D18S51 | 20 | 20 | | | | |
| D8S1179 | 12 | 12 | | | | |
| D3S1358 | 15 | 15 | | | | |
| D6S1043 | 12 | 17 | | | | |
| PENTAE | 5 | 16 | | | | |
| D19S433 | 12.2 | 14 | | | | |
| PENTAD | 12 | 14 | | | | |

Others:

1. Genotyping Strategy and Site Distribution

Attached Table. Experimental Strategy and Sites

| | Strategy 1 | Strategy 2 | Strategy 3 | Strategy 4 | Strategy 5 | Strategy 6 |
|---|------------|------------|------------|------------|------------|------------|
| 1 | D3S1358 | D8S1179 | D19S433 | AMEL | D3S1358 | D8S1179 |
| 2 | VWA | D21S11 | TH01 | D5S818 | VWA | D21S11 |
| 3 | D7S820 | D16S539 | D13S317 | D12S391 | D7S820 | D16S539 |
| 4 | CSF1PO | D2S1338 | TPOX | FGA | CSF1PO | D2S1338 |
| 5 | PENTAE | PENTAD | D18S51 | | PENTAE | PENTAD |
| 6 | | | D6S1043 | | | |

2. DSMZ tools was used to carry on the cell line comparison, which contains 2455 cell lines STR data from ATCC, DSMZ, JCRB, ECACC and RIKEN databases. If the cell is not included in the above cell library, the users need to compare with other databases.

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Issue date: August 14, 2018