Cell Line Authentication Report

STR Profiling

Sample Type: Cell Line

Sample from: Eye & Ent Hospital Of Fudan University

Testing Method: STR Genotyping

Report Time: May16, 2017
COMPANY STATEMENT

1. THIS REPORT IS ONLY RESPONSIBLE FOR THE SAMPLES ANALYZED.
2. THE TESTING RESULTS AND THE ORGANIZATION NAME WILL NOT BE USED FOR ADVERTISEMENT, COMMERCIAL EXHIBITIONS, COMMERCIAL PERFORMANCE AND OTHER COMMERCIAL ACTIVITIES.
3. OBJECTIONS SHOULD BE RAISED WITHIN FIFTEEN DAYS AFTER THE RECEIPT OF THIS REPORT.
4. THE PAPER REPORT WITH CONTENT ALTERING, ADDING OR WITHOUT THE STAMPED SEAL OF THE COMPANY ARE INVALID.

Testing Company: Shanghai Biowing Applied Biotechnology Co. Ltd
Address: Room 4F, 8th Buiding, Guiguo Garden, NO.471 Guiping Road, Caohejing Development Zone, Shanghai
Tel: +86-021-33559491
Contact: YiQun Chen
E-mail: biowing@vip.163.com
Cell Line Authentication – STR Profiling Report

Sample code

| Customer’s code | Company Code |
|-----------------|--------------|
| B3              | 20170508     |

Sample Number: 1

Sample Type: Cell line

Testing Type: STR

Sample From: Eye & Ent Hospital Of Fudan University

Testing Method:

DNA was extracted by a commercial kit from CORNING (AP-EMN-BL-GDNA-250G). The twenty STRs including Amelogenin locus were amplified by six multiplex PCR and separated on ABI 3730XL Genetic Analyzer. The signals were then analyzed by the software GeneMapper.

Data Interpretation:

Cell lines were authenticated using Short Tandem Repeat (STR) analysis as described in 2012 in ANSI Standard (ASN-0002) by the ATCC Standards Development Organization (SDO) and in Capes-Davis et al., Match criteria for human cell line authentication: Where do we draw the line? Int J Cancer. 2013;132(11):2510-9.

Test Results:

1. Result

Table 2. Matching information on the cell lines

| Sample Code | Multi-allele | Cell line matched | Cell Bank | EV | Percentage |
|-------------|--------------|-------------------|-----------|----|------------|
| 20170508    | Yes          | SRA 01/04         | DSMZ      | 1  | 9/9        |

- Multi-allele means some STR contain more than two loci.
2. Sample Description

20170508:

A. The STR results showed that multiple alleles were found in this cell line, and no cross contamination of human cells was found in the cell line.

B. The DNA of the cell lines found to perfect match the type of cell lines in a cell line retrieval, DSMZ database shows that cells called SRA 01/04, corresponding to the cell number RCB1591.

| Cell No. | Cell name | loci names |
|----------|-----------|------------|
| D5S818   | 11, 12, 13| 10, 10     |
| D13S317  | 10, 11, 13| 10, 10     |
| D7S820   | 10, 11, 13| 10, 10     |
| D16S539  | 10, 10    | 10, 10     |
| VWA      | 17, 20    | 17, 20     |
| TH01     | 6, 7      | 6, 7       |
| AMEL     | X, Y      | X, Y       |
| TPOX     | 8, 8      | 8, 8       |
| CSF1PO   | 11, 13, 15| 11, 13, 15|
| D12S391  | 19, 22    | 19, 22     |
| FGA      | 20, 22.2  | 20, 22.2   |
| D2S1338  | 23, 24    | 23, 24     |
| D21S11   | 27, 28    | 27, 28     |
| D18S51   | 13, 13    | 13, 13     |
| D8S1179  | 14, 15    | 14, 15     |
| D3S1358  | 14, 15    | 14, 15     |
| D6S1043  | 16, 18    | 16, 18     |
| PENTAE   | 7, 21     | 7, 21      |
| D19S433  | 13, 14    | 13, 14     |
| PENTAD   | 9, 12, 13 | 9, 12, 13  |

3. Genotyping Result

Table 3. STR and Amelogenin Genotyping Results of Cell line 20170508

| Marker  | Sample | Cell Bank information |
|---------|--------|----------------------|
|         | Allele1 | Allele2 | Allele3 | Allele4 | Allele1 | Allele2 | Allele3 |
| D5S818  | 11      | 12      | 13      |         | 11      | 12      | 13      |
| D13S317 | 10      | 10      |         | 10      |         | 10      |         |
| D7S820  | 10      | 11      | 13      |         | 10      | 11      | 13      |
| D16S539 | 10      | 10      |         | 10      |         | 10      |         |
| VWA     | 17      | 20      |         | 17      |         | 20      |         |
| TH01    | 6       | 7       |         | 6       |         | 7       |         |
| AMEL    | X       | Y       |         | X       |         | Y       |         |
| TPOX    | 8       | 8       |         | 8       |         | 8       |         |
| CSF1PO  | 11      | 13      | 15      | 11      | 13      | 15      |         |
| D12S391 | 19      | 22      |         | 19      |         | 22      |         |
| FGA     | 20      | 22.2    |         | 20      |         | 22.2    |         |
| D2S1338 | 23      | 24      |         | 23      |         | 24      |         |
| D21S11  | 27      | 28      |         | 27      |         | 28      |         |
| D18S51  | 13      | 13      |         | 13      |         | 13      |         |
| D8S1179 | 14      | 15      |         | 14      |         | 15      |         |
| D3S1358 | 14      | 15      |         | 14      |         | 15      |         |
| D6S1043 | 16      | 18      |         | 16      |         | 18      |         |
| PENTAE  | 7       | 21      |         | 7       |         | 21      |         |
| D19S433 | 13      | 14      |         | 13      |         | 14      |         |
| PENTAD  | 9       | 12      | 13      | 9       |         | 12      | 13      |
Others:

1. Genotyping Strategy and Site Distribution

|   | Strategy 1 | Strategy 2 | Strategy 3 | Strategy 4 | Strategy 5 | Strategy 6 |
|---|------------|------------|------------|------------|------------|------------|
| 1 | TH01       | AMEL       | TPOX       | D3S1358    | PENTAE     | D19S433    |
| 2 | D12S391    | D5S818     | VWA        | D13S317    | PENTAD     |            |
| 3 | D7S820     | D2SI338    | D8S1179    | D6S1043    |            |            |
| 4 | CSF1PO     | D21S11     |            | D16S539    |            |            |
| 5 | FGA        | D18S51     |            |            |            |            |

*The allele match algorithm compares the 8 core loci plus amelogenin only, even though alleles from all loci will be reported when available.*

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

---

Technician: Menglu Shen  
Check: Yang Bai  
Person in Charge: Yiqun Chen

Issue date: May 16, 2017, 2017