

Cell Line Authentication – STR Profiling Report

Sample Type: Cell Line

Testing Type: STR

Sample code:

Table 1. Sample Code

Customer's code	Company Code
830	20210202-01

Sample Number: 1

Sample Type: Cell line

Testing Type: STR

Sample From: Shanghai Zhong Qiao Xin Zhou Biotechnology Co.,Ltd.

Testing Method:

DNA was extracted by a commercial kit from CORNING (AP-EMN-BL-GDNA-250G). The ten STRs including one human locus were amplified by 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, mouse cell line authentication cytotechnology. 2014;66:133-147.



Test Results:

1. Result

Table 2. Matching information on the cell lines

Sample Code	Multi-allele	Cell line matched	Cross contamination	EV
20210202-01	NO	Rat cell line	No	-

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

2. Sample Description

20210202-01:

The sample profile is Rat, but not a match for any profile, no multiple alleles and no cross contamination was found in the cell line.

3. QPCR Result

Table 3. Summary of test results

Testing samples / channels	Detection channels Ct	Control Channel Ct	Result
Human	undet	25.24	-
Mouse	undet	32.38	-
Rat	24.86	31.68	positive
Negative reference	undet	-	-
Samples tested			Rat

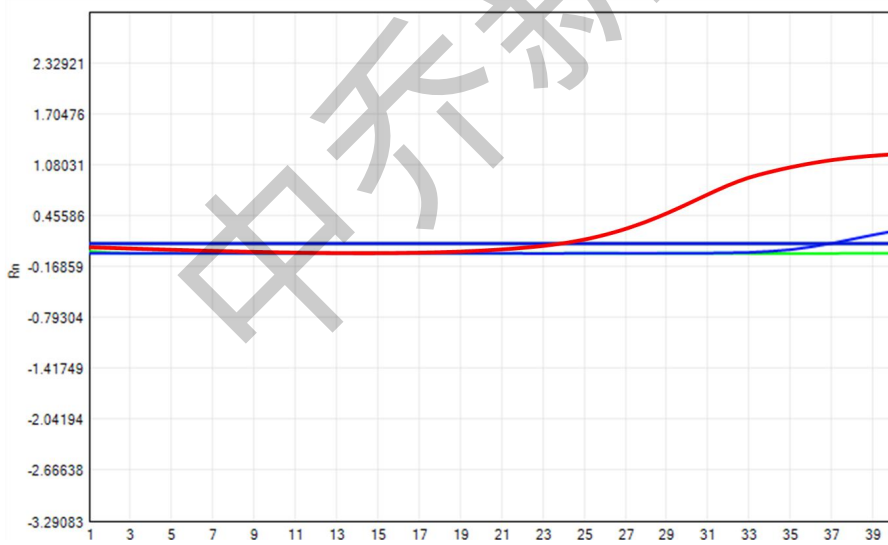


Figure.1 qPCR test results

Note: Blu -Human (Hex), Green-Mouse (FAM), Red- Rat (CY3), Blu- negative control

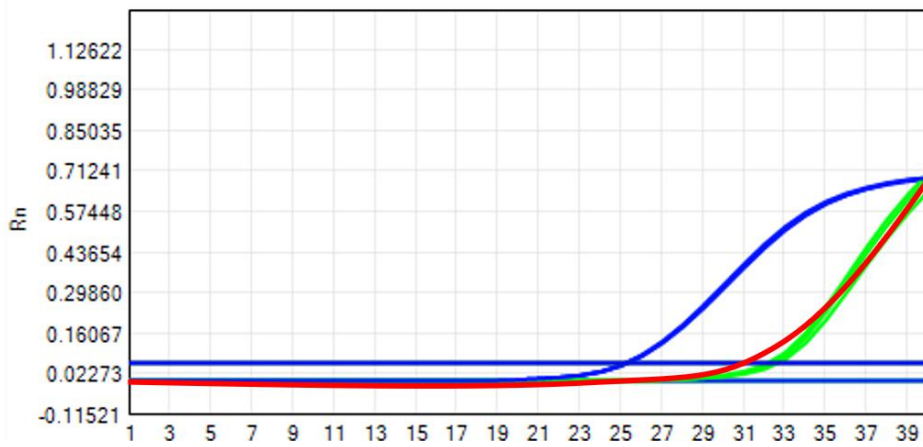


Figure.2 Comparison qPCR Test Results

Note: Blu -Human (Hex), Green-Mouse (FAM), Red- Rat (CY3), Blu- negative control

Others:

1. Genotyping Strategy and Site Distribution

Attached Table. Experimental Strategy and Sites

	Detection channels	Control Channel	Negative channels
1	Human (Hex)	Human (Hex)	-
2	Mouse (FAM)	Mouse (FAM)	-
3	Rat(CY3)	Rat(CY3)	-

2. Cell line to be tested were compared with the cell lines in the database, 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. D4s2408 is a human locus, which is used to detect whether the cells are contaminated by human.