



Cell Line 293 [HEK-293] STR Profile Report

Cell Line Designation: [HEK-293]

Date Sample Received: Aug20th, 2019

Report Date: Aug23th, 2019

Methodology: Twenty short tandem repeat (STR) loci plus the gender determining locus, Amelogenin, were amplified using the commercially available PowerPlex® 21 System from Promega Corporation. The amplified products were processed using the Applied Biosystems 3730xl DNA Analyzer. Data were analyzed using GeneMapper 5.0 software (Applied Biosystems). Appropriate positive and negative controls were run and confirmed for each sample submitted.

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.

GENECHEM performs STR Profiling following ISO 9001:2008 and ISO/IEC 17025:2005 quality standards.

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TEST RESULTS:

Test Results for Submitted Sample		Reference Database Profile
Loci	Query Profile: 293 [HEK-293]	Database Profile: 293 [HEK-293]
Amelogenin	X	X
D13S317	12 14	12 14
D16S539	9 13	9 13
CSF1PO	12	12
TH01	7 9.3	7 9.3
vWA	16 19	16 19
D7S820	11 12	11 12
D5S818	8	8
TPOX	11	11
D3S1358	15 17	
D1S1656	15 17.3	
D6S1043	11	
Penta E	7 15	
D18S51	17 18	
D2S1338	19	
Penta D	9 10	
D8S1179	12 14	
D12S391	19 21	
D19S433	18	
FGA	23	
D21S11	28 30.2	
<p><i>Note: The top nine Loci (8 core STR loci plus Amelogenin) can be made public to verify cell identity. In order to protect the identity of the donor, please do not publish the allele calls from all the STR loci tested.</i></p>		

Percent Match: **100%**

The submitted profile is an exact match for the following human cell line(s) in the reference database (8 core loci plus Amelogenin): **293 [HEK-293]**

Explanation of Test Results

Cell lines with $\geq 80\%$ match are considered to be related; i.e., derived from a common ancestry. Cell lines with between a 55% to 80% match require further profiling for authentication of relatedness. Reference Database Profile was obtained from ExpASY, DSMZ, ATCC or China National Infrastructure of Cell Line Resource STR database.



