

STR Authentication Report For Cell Line

1. Cell Name: GM12878
2. Test Method: DNA was extracted using the genome extraction kit (Axygen), amplified using a 21- STR amplification protocol, the STR loci and gender gene Amelogenin were detected on the ABI 3730XL Genetic Analyzer.
3. Sample gene genotype analysis result:

Genotype analysis results of STR and Amelogenin loci in cells						
STR Loci	STR profile for Sample cell			STR profile for Cell Bank cell		
	Cell name: GM12878-K			Cell name: GM12878		
	Allele1	Allele2	Allele3	Allele1	Allele2	Allele3
D5S818	12	12		12	12	
D13S317	11	12		11	12	
D7S820	8	10		8	10	
D16S539	10	11		10	11	
VWA	15	17		15	17	
TH01	7	9.3		7	9.3	
AMEL	X	X		X	X	
TPOX	8	8		8	8	
CSF1PO	10	11		10	11	

Note: The above figure shows the comparison results of nine genotype loci for detecting cells and cells from the cell bank.

4. Conclusion: The STR results of **GM12878** cells are consistent with the genotypes of **GM12878** cell lines in database, the cell ID corresponded to **CVCL_7526**, and the STR results **completely matched**. In the test, **No multi allele was found, and there was no human source contamination** in this cell line.

5. Attached Image

