**STR Profile Report**

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| **User Name** | **Kenneth Thompson** |
| **Date Submitted**  | **1/27/2016** |
| **Report Date**  | **2/1/2016** |
| **Sample submitted** | **Genomic DNA and Cell culture** |
| **Sample Names** | **ARPE-19 DNA and ARPE-Cell** |

**Genomic DNA isolation**: Genomic DNA was isolated using DNA easy kit for blood and Tissue from Qiagen. DNA concentration was measured by nanodrop and verified by running DNA on 1% Agarose gel

**Methods:**

Cell-lines were authenticated using GenePrint 10 System from Promega. The GenePrint® 10 System allows co-amplification of repeat regions of nine short tandem repeat human loci, including the ASN-0002 loci (TH01, TPOX, vWA, Amelogenin, CSF1PO, D16S539, D7S820, D13S317 and D5S818) as well as D21S11. The samples were processed on ABI 3130XL Genome Analyzer. Data was analyzed using GeneMapper® v4.0 software. Positive and negative controls were run.

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| **Loci** | **ARPE-19\_DNA** | **ARPE-19\_cell** |
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| D5S818 | 13 | 13 |
| D13S317 | 11, 12 | 11, 12 |
| D7S820 | 9, 11 | 9, 11 |
| D16S539 | 9, 11 | 9, 11 |
| vWA | 16, 19 | 16, 19 |
| TH01 | 6, 9.3 | 6, 9.3 |
| AMEL | X, Y | X, Y |
| TPOX | 9, 11 | 9, 11 |
| CSF1PO | 11 | 11 |
| D21S11 | 28, 29 | 28, 29 |
| Number of Shared Allele | 100% match with CRL-2302 | 100% match with ATCC no. CRL-2302 |

An 80% match or greater indicates that the cells in question are from the same donor as the reference cells and less than an 80% match could indicate cell line contamination or misidentification (Capes-Davis, 2012). Cell lines with between a 55% to 80% match require further profiling for authentication of relatedness.