Data S1. STR profile report for the MCF7 cell line.

Procell *Procell Life Science&Technology Co,.Ltd.*

Cell Line Authentication Service

MCF7 STR Profile Report

Methodology:

Twenty short tandem repeat (STR) loci plus the gender determining locus, Amelogenin, were amplified using a commercially available STR profiling Kit. The cell line sample was processed using the ABI Prism® 3500XL Genetic Analyzer. Data were analyzed using GeneMapper® 5 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 (ANSI/ATCC ASN-0002-2011 *Authentication of Human Cell Lines: Standardization of STR Profiling*) by the ATCC Standards Development Organization (SDO).

Test Results of Submitted Sample:

MCF7（PC75）		
Marker	***Allele 1***	***Allele 2***
D3S1358	16	16
THO1	6	6
D21S11	30	30
D18S51	14	14
Penta E	7	12
D5S818	11	12
D13S317	11	11
D7S820	8	9
D16S539	11	12
CSF1PO	10	10
Penta D	12	12
AMEL	X	X
Vwa	14	15
D8S1179	10	14
TPOX	9	12
FGA	23	25
D19S433	13	13
D2S1338	21	23
D1S1656	11	15.3
D6S1043	12	18
D12S391	18	20

NOTE:

Ⅰ. *Loci highlighted in grey (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 In order to protect the identity of the donor, Please do not publish the allele calls from the STR loci tested.*

Ⅱ. *A relatively common occurrence of STR typing of human cancer cell lines is multiple Alleles at several loci. Three or more Alleles at one or two loci may be due to somatic mutation, trisomy or gene duplications. Events with more than three Alleles at more than three loci may be due to cellular contamination.*

Ⅲ. *Electropherograms showing raw data and Map are attached.*

Result of searching against STR Profile Database:

Explanation of Test Results:

Cell lines with ≥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. Here only show cell lines with ≥80% match.

STR Profile from ATCC:

MCF7 (ATCC® HTB-22™)

Organism: ***Homo sapiens*, human** / Cell Type: **epithelial** / Tissue: **mammary gland**, Disease: **adenocarcinoma**

GENERAL INFORMATION	CHARACTERISTICS	CULTURE METHOD	SPECIFICATIONS

STR Profile	Amelogenin: X CSF1PO: 10 D13S317: 11 D16S539: 11,12 D5S818: 11,12 D7S820: 8,9 TH01: 6 TPOX: 9,12 vWA: 14,15

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Addendum: Electropherogram (peak data) for Submitted Sample