



Thaw and Culture Details

| | |
|----------------------------------|--|
| Cell Line Name | MCW005i-4002552 |
| WiCell Lot Number | WB66498 |
| Provider | Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel |
| Banked By | WiCell |
| Thaw and Culture Recommendations | WiCell recommends thawing 1 vial into 4 wells of a 6 well plate. |
| Culture Platform | Feeder Independent |
| | Medium: mTeSR™1 |
| | Matrix: Matrigel® |
| Protocol | WiCell Feeder Independent mTeSR1 Protocol |
| Passage Number | p13 These cells were cultured for 12 passages prior to freeze and post colony picking. WiCell adds +1 to the passage number at freeze to best represent what the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 13. |
| Date Vialied | 08-August-2017 |
| Vial Label | MCW005i-4002552 p13 WB66498 |
| Biosafety and Use Information | Appropriate biosafety precautions should be followed when working with these cells. The end user is responsible for ensuring that the cells are handled and stored in an appropriate manner. WiCell is not responsible for damages or injuries that may result from the use of these cells. Cells distributed by WiCell are intended for research purposes only and are not intended for use in humans. |

Testing Performed by WiCell

| Test Description | Test Provider | Test Method | Test Specification | Result |
|--------------------------------|---|-----------------------------------|--|------------|
| Karyotype by G-banding | WiCell | SOP-CH-003 | Expected karyotype | See Report |
| | Results: 46,XX,t(5;6)(q11.1;q15)[20] Interpretation: This is an abnormal karyotype; results contain a clonal chromosomal aberration not considered recurrently acquired in cultures of this cell type. No other clonal abnormalities were detected at the stated band level of resolution. | | | |
| Post-Thaw Viable Cell Recovery | WiCell | SOP-CH-305 | ≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage | Pass |
| Identity by STR | UW Translational Research Initiatives in Pathology Laboratory | PowerPlex 16 HS System by Promega | Defines STR profile of deposited cell line | Pass |
| Sterility | Steris | ST/07 | Negative | Pass |
| Mycoplasma | WiCell | SOP-QU-004 | Negative | Pass |



Testing Reported by Provider

The Provider stated that some or all of the additional analyses listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

- Tra1-60 marker expression
- mRNA expression by qPCR
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

| Approval Date | Quality Assurance Approval |
|---------------|--|
| 14-May-2018 | <p style="text-align: right;">5/21/2020</p> <p>X JKG JKG Quality Assurance Signed by: Gay, Jenna</p> |

Date Reported: Wednesday, June 06, 2018

Cell Line Sex: Female

Cell Line: MCW005i-40002552-WB66498
13753

Reason for Testing: lot release testing

Passage#: 14

Date of Sample: 5/31/2018

Investigator: [REDACTED], WiCell

Specimen: Human IPS

Results: 46,XX,t(5;6)(q11.1;q15)[20]



Cell: 3

Slide: G02

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 500 - 525

Interpretation:

This is an abnormal karyotype; results contain a clonal chromosomal aberration not considered recurrently acquired in cultures of this cell type. No other clonal abnormalities were detected at the stated band level of resolution.

Completed by: [REDACTED], CG(ASCP)

Reviewed and Interpreted by: [REDACTED], PhD, FACMG

A signed copy of this report is available upon request.

Date: _____ **Sent By:** _____ **Sent To:** _____ **QC Review By:** _____

Limitations: This assay allows for microscopic visualization of numerical and structural chromosome abnormalities. The size of structural abnormality that can be detected is >3-10Mb, dependent upon the G-band resolution obtained from this specimen. For the purposes of this report, band level is defined as the number of G-bands per haploid genome. It is documented here as "band level", i.e., the range of bands determined from the four karyograms in this assay. Detection of heterogeneity of clonal cell populations in this specimen (i.e., mosaicism) is limited by the number of metaphase cells examined, documented here as "# of cells counted".

This assay was conducted solely for listed investigator/institution. The results of this assay are for research use only. Unless otherwise mutually agreed in writing, the services provided to you hereunder by WiCell Research Institute, Inc. ("WiCell") are governed solely by WiCell's Terms and Conditions of Service, found at www.wicell.org/privacyandterms. Any terms you may attach to a purchase order or other document that are inconsistent, add to, or conflict with WiCell's Terms and Conditions of Service are null and void and of no legal force or effect.

Sample Report:

13753-STR

Sample Name on Tube: 13753-STR84.8 ng/ μ L, (A260/280=1.88)**Sample Type:** Cells**Cell Count:** ~2 million cells**Requestor:**

WiCell Research Institute

Quality Department

Sample Date: N/A**Receive Date:** 06/04/18**Assay Date:** 06/05/18**File Name:** 180606 STR TCS**Report Date:** 06/08/18

| STR Locus | STR Genotype Repeat # | STR Genotype |
|------------|---|---|
| FGA | 16-18,18.2,19,19.2,20,20.2,21,21.2,22, 22.2, 23, 23.2, 24, 24.2, 25, 25.2, 26-30, 31.2, 43.2, 44.2,45.2, 46.2 | Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support . |
| TPOX | 6-13 | |
| D8S1179 | 7-18 | |
| vWA | 10-22 | |
| Amelogenin | X,Y | |
| Penta D | 2.2, 3.2, 5, 7-17 | |
| CSF1PO | 6-15 | |
| D16S539 | 5, 8-15 | |
| D7S820 | 6-14 | |
| D13S317 | 7-15 | |
| D5S818 | 7-16 | |
| Penta E | 5-24 | |
| D18S51 | 8-10, 10.2, 11-13, 13.2, 14-27 | |
| D21S11 | 24,24.2,25,25.2,26-28,28.2,29,29.2, 30, 30.2,31, 31.2,32,32.2,33,33.2, 34,34.2,35,35.2,36-38 | |
| TH01 | 4-9,9.3,10-11,13.3 | |
| D3S1358 | 12-20 | |

Results: Based on the 13753-STR cells submitted by WiCell QA dated and received on 06/04/18, this sample (Label on Tube: 13753-STR) defines the STR profile of the human stem cell line MCW005i-40002552 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW005i-40002552 stem cell line were detected and the concentration of DNA required to achieve an acceptable STR genotype (signal/ noise) was equivalent to that required for the standard procedure (~1 ng/amplification reaction) from human genomic DNA. This result suggests that the 13753-STR sample submitted corresponds to the MCW005i-40002552 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

Sensitivity: Sensitivity limits for detection of STR polymorphisms unique to either this or other human stem cell lines is ~2-5%.



Digitally Signed on 06/11/18



Digitally Signed on 06/11/18

BA
TRIP Laboratory, Molecular

, PhD, Director / Co-Director
UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report



WiCell
504 S Rosa Rd, Rm 101
Madison, WI 53719

**CORRECTED
REPORT**

SAMPLE #: 18020925
DATE RECEIVED: 15-Feb-18
TEST INITIATED: 20-Feb-18
TEST COMPLETED: 06-Mar-18

SAMPLE NAME / DESCRIPTION:

UCSD084i-6-1 WB61879 13391,UCSD089i-15-1 WB61822 13392
UCSD131i-77-1 WB62260 13393, UCSD134i-80-1 WB62286 13394
UCSD145i-89-1 WB61873 13395, UCSD156i-12-2 WB61889 13396
UCSD171i-100-1 WB62271 13397, UCSD174i-18-2 WB62018 13398
UCSD183i-102-1 WB62287 13399, UCSD186i-103-1 WB62268 13400
UCSD211i-32-1 WB62424 13401, UCSD087i-6-4 WB63448 13402
UCSD090i-15-2 WB62824 13403, UCSD120i-39-1 WB63446 13404
UCSD124i-7-1 WB62648 13405, UCSD149i-10-4 WB63469 13406
UCSD169i-22-2 WB63540 13407, UCSD203i-109-1 WB62436 13408
UCSD096i-34-1 WB64879 13409, UCSD101i-36-2 WB63523 13410
UCSD121i-39-2 WB64666 13411, UCSD122i-73-1 WB63538 13412
UCSD130i-76-1 WB64881 13413, UCSD138i-84-1 WB63874 13414
UCSD141i-37-2 WB65028 13415, UCSD144i-88-1 WB63539 13416
UCSD157i-12-3 WB64922 13417, UCSD159i-91-1 WB64880 13418
UCSD123i-74-1 WB53944 13419, UCSD126i-7-3 WB53933 13420
UCSD185i-8-2 WB54165 13421, UCSD086i-6-3 WB58711 13422
UCSD091i-15-3 WB58791 13423, UCSD118i-38-1 WB57664 13424
UCSD127i-7-4 WB58690 13425, UCSD137i-83-1 WB58970 13426
UCSD142i-86-1 WB58721 13427, UCSD146i-10-1 WB58698 13428
UCSD148i-10-3 WB58204 13429, UCSD162i-94-1 WB58792 13430
UCSD176i-17-1 WB58933 13431, UCSD177i-17-2 WB57849 13432
UCSD202i-108-1 WB57850 13433, UCSD205i-110-1 WB58200 13434
MCW038i-40000503 WB66475 13435, MCW005i-40002552 WB66498 13436
MCW019i-A7230 WB66534 13437, MCW022i-A2965 WB66509 13438
MCW023i-A2121 WB66535 13439, MCW027i-50000784 WB66536 13440

UNIQUE IDENTIFIER: NA

PRODUCT REGISTRATION: Other: Human iPS cells

Native Product Sterility Report



TEST RESULTS:

| # Tested | # Positives (Growth) | - Control |
|----------|----------------------|-----------|
| 50 | 0 | Negative |

TEST SUMMARY:

| # Samples | Media Type | Volume (mL) | Incubation Temperature (° C) | Incubation Duration (Days) |
|-----------|------------|-------------|------------------------------|----------------------------|
| 50 | TSB | 40 | 20-25 | 14 |
| 50 | FTG | 40 | 30-35 | 14 |

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS:

Report revised due to incorrect Volume.

Sample #18020925

"Reported As" per packing slip

REVIEWED BY

DATE

11 OCT 18

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. This test report shall not be reproduced, except in full, without prior written approval. Liability is limited to the costs of the tests.



Mycoplasma Detection Assay Report

Testing Performed by WiCell

Lot Release Testing

May 24, 2018

FORM SOP-QU-004.01

Version G Edition 02

Reported by: AP

Reviewed by: DF

BD Monolight 180

| # | Sample Name | Reading A | | A | Reading B | | B | Ratio B/A | Result | Comments/Suggestions |
|---|--------------------------------|-----------|------|-------|-----------|-------|-------|-----------|----------|----------------------|
| | | RLU1 | RLU2 | Ave | RLU1 | RLU2 | Ave | | | |
| 1 | MCW005i-40002552-WB66498 13753 | 277 | 274 | 275.5 | 98 | 91 | 94.5 | 0.34 | Negative | |
| 2 | Positive (+) Control | 605 | 627 | 616 | 33968 | 34195 | 34082 | 55.33 | Positive | |
| 3 | Negative (-) Control | 1030 | 1010 | 1020 | 105 | 117 | 111 | 0.11 | Negative | |

