



Thaw and Culture Details

| | |
|----------------------------------|--|
| Cell Line Name | MCW083i-4000695 |
| WiCell Lot Number | WB67174 |
| Parent Material | MCW083i-4000695-DB66390 |
| Provider | Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel |
| Banked By | WiCell |
| Thaw and Culture Recommendations | WiCell recommends thawing 1 vial into 3 wells of a 6 well plate. |
| Culture Platform | Feeder Independent |
| | Medium: TeSR™-E8™ |
| | Matrix: Matrigel® |
| Protocol | WiCell Feeder Independent E8 Medium Protocol |
| Passage Number | p16 These cells were cultured for 15 passages prior to freeze and post colony selection. WiCell adds +1 to the passage number at freeze to best represent the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 16. |
| Date Viald | 30-April-2019 |
| Vial Label | MCW083i-4000695 p16 WB67174 |
| 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,inv(5)(p14p15.3)[14]/46,XX[6] Interpretation: This is an abnormal karyotype. A paracentric inversion of the short (p) arm of chromosome 5 is present in fourteen of twenty cells examined. 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-CH-044 | 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 |
|---------------|---|
| 04-June-2020 | <p style="text-align: right;">6/4/2020</p> <p>X JKG JKG Quality Assurance Signed by: Gay, Jenna</p> |



Chromosome Analysis Report: 079010

Date Reported: Friday, November 15, 2019

Cell Line Sex: Female

Cell Line: MCW083i-40000695-WB67174
15114

Reason for Testing: Lot Release Testing

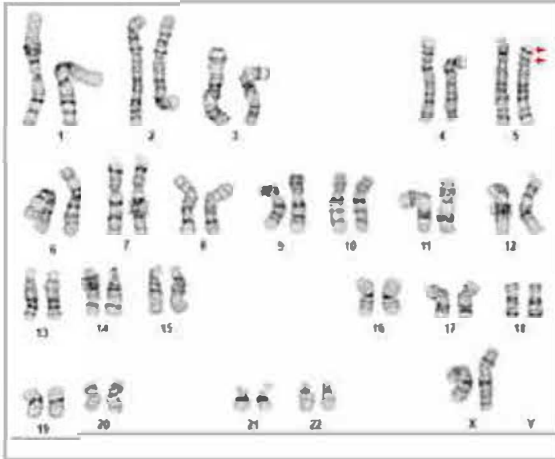
Passage#: 16

Date of Sample: 11/6/2019

Investigator: [REDACTED], WiCell

Specimen: Human iPSC

Results: 46,XX,inv(5)(p14p15.3)[14]/46,XX[6]



Cell: 10

Slide: G01

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 425 - 450

Interpretation:

This is an abnormal karyotype. A paracentric inversion of the short (p) arm of chromosome 5 is present in fourteen of twenty cells examined. No other clonal abnormalities were detected at the stated band level of resolution.

Completed by: [REDACTED]

Reviewed and Interpreted by: [REDACTED], Ph.D.

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.



HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
<https://research.pathology.wisc.edu/trip-home/>
(608) 265-9168

Short Tandem Repeat Analysis



Your Lab Partner

characterization@wicell.org
(608) 316-4145

Sample Report:

15114-STR

Sample Name on Tube: 15114-STR

77.8 ng/ μ L, (A260/280=1.90)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 11/11/19

Report Sent: 11/19/19

Assay Date: 11/13/19

File Name: STR 191113 wmr

Report Date: 11/19/19

| 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 15114-STR cells submitted by WiCell QA dated and received on 11/11/19, this sample (Label on Tube: 15114-STR) defines the STR profile of the human cell line MCW083i-40000695 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW083i-40000695 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 15114-STR sample submitted corresponds to the MCW083i-40000695 cell line and was not contaminated with any other human 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 cell lines is ~2-5%.

X *RMB*

Digitally Signed on 11/19/19

██████████, BA
TRIP Laboratory, Molecular

X *WMR*

Digitally Signed on 11/19/19

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

Testing was accomplished by analysis of human genetic polymorphisms at STR loci. This methodology has not yet been approved by the FDA and is for investigational use only.

Acknowledge TRIP in your publications, posters & presentations. For details, see: <https://research.pathology.wisc.edu/acknowledging-trip/>
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Native Product Sterility Report



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

SAMPLE #: 19052193
DATE RECEIVED: 23-May-19
TEST INITIATED: 03-Jun-19
TEST COMPLETED: 17-Jun-19

| SAMPLE NAME / DESCRIPTION: | | | |
|----------------------------|---------|--------|--|
| STAN011i-123-1 | DB31129 | 14728 | |
| STAN012i-123-2 | DB31135 | 14729 | |
| MCW066i-U2368 | WB67169 | 14730 | |
| MCW049i-40001630 | WB67173 | 14731 | |
| MCW083i-40000695 | WB67174 | 14732 | |
| MCW092i-U2390 | WB67175 | 14733 | |
| MCW094i-U7120 | WB67177 | 14734 | |
| MCW095i-U2311 | WB67185 | 14735 | |
| MCW088i-40000442 | WB67186 | 14736 | |
| MCW089i-40000312 | WB67187 | 14737 | |
| MCW080i-U2236 | WB67188 | 14738 | |
| CBiPS-6.2 | DB66959 | 14739 | |
| CBiPS-19.11 | DB66960 | 14740 | |
| CBiPS-6.13 | DB66961 | 14741 | |
| CBiPS-E12C1 | DB66962 | 14742 | |
| CBiPS-E17C6 | DB66963 | 14743 | |
| CBiPS-LZ6-1 | DB66976 | 14744 | |
| CBiPS-LZ6-2 | DB66977 | 14745 | |
| CBiPS-LZ6-12 | DB66978 | 14746 | |
| Sendai-9-1 | DB66967 | 14747 | |
| CBiPS-LZ6+3 | DB66979 | 14748 | |
| 029 iPS clone 4 | DB66975 | 14749 | |
| retro-20.1 | DB66966 | 14750 | |
| NiPSC | DB66965 | 14751 | |
| SCR2101i | DB42034 | 14752 | |
| SCR2115i | DB42040 | 14753 | |
| SCR2208i | DB42043 | 14754* | |
| UNIQUE IDENTIFIER: | NA | | |

Native Product Sterility Report

**TEST RESULTS:**

| # Tested | # Positives (Growth) | - Control |
|----------|----------------------|-------------|
| 30 | 0 | 2 Negatives |

TEST SUMMARY:

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

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS:

Sample #19052193

"Reported as" per packing slip

| | | |
|-----------------|---------|-------|
| *SCR2210i | DB42046 | 14755 |
| SCR2305i | DB42054 | 14756 |
| WC044i-IVF15-36 | WB67190 | 14757 |

REVIEWED BY

DATE

20 Jun 19

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. Results applied to samples as received.



Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell
05Nov19

FORM SOP-CH-048.01

Version A Edition 01

| Sample Name | Result | Comments/Suggestions |
|---|----------|---|
| MCW093i-40000435-WB67168 15115 (78976) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| MCW083i-40000695-WB67174 15114 (78977) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| MCW074i-40002460-WB67203 15118 (78978) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| MCW070i-40002330-WB67159 15117 (78979) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| WTB-DB66964 15116 (78980) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| WC051i-FX08-23-WB67327 15107 (78981) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| HNEpc p3, ARPE-19 p3 C166 p10 INC 124 11/4/19 Empirico (78982) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| pHTM p5, HEK293 p5, 3T3-LI p7 INC124 11/4/19 Empirico (78983) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| Positive (+) Control | Positive | |
| Negative (-) Control | Negative | |

Reported by: [REDACTED], Cell Culture Specialist

Reviewed by: [REDACTED], Cell Culture Specialist

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A gel image is available upon request.