



Thaw and Culture Details

Cell Line Name	PENN151i-M1-5
WiCell Lot Number	DB36083
Provider	University of Pennsylvania – Dr. Daniel Rader
Banked By	Penn Institute for Regenerative Medicine iPS Core Facility
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 2 wells of a 6 well plate. WiCell recommends thawing using ROCK Inhibitor for best results.
Culture Platform	Feeder Dependent
	Medium: hESC Medium (KOSR)
	Matrix: MEF
Protocol	WiCell Feeder Dependent Protocol
Passage Number	p16 These cells were cultured for 16 passages prior to freeze and post colony picking. Therefore, plated cells at thaw should be labeled passage 17.
Date Vialled	11-May-2014
Vial Label	iPS-PB-sev M1 sev5 P16 5/11/14 RY
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
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	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.

- SNP microarray
- Flow Cytometry (Tra1-60 and SSEA-4)
- Differentiation into hepatocytes
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})



Approval Date	Quality Assurance Approval
27-June-2016	<p style="text-align: right;">12/18/2019</p> <p>X JKG _____ JKG Quality Assurance Signed by Gay, Jenna</p>

Date Reported: Wednesday, December 11, 2019

Cell Line Sex: Female

Cell Line: PENN151i-M1-5-DB36083 15172

Reason for Testing: Lot release testing

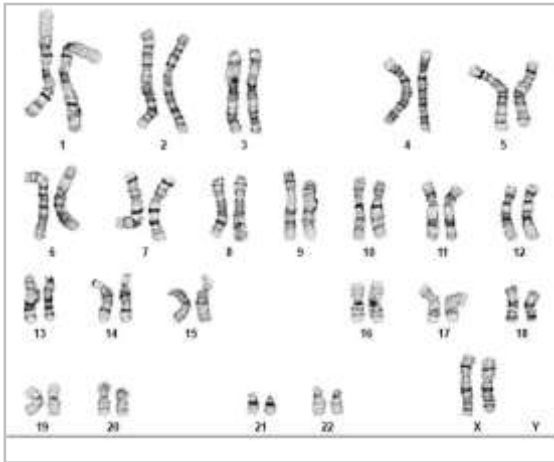
Passage#: 18

Date of Sample: 12/4/2019

Investigator: [REDACTED], WiCell

Specimen: Human iPSC

Results: 46,XX



Cell: 7

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 425 - 525

Interpretation:

This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.

Completed by: [REDACTED] CG(ASCP)

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:

15172-STR

Sample Name on Tube: 15172-STR

62.1 ng/μL, (A260/280=1.83)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 12/05/19

Report Sent: 12/16/19

Assay Date: 12/10/19

File Name: STR 191212 wmr

Report Date: 12/16/19

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 15172-STR cells submitted by WiCell QA dated and received on 12/05/19, this sample (Label on Tube: 15172-STR) defines the STR profile of the human cell line PENN151i-M1-5 comprising 29 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human PENN151i-M1-5 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 15172-STR sample submitted corresponds to the PENN151i-M1-5 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 12/16/19

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

X *WMR*

Digitally Signed on 12/16/19

██████████, 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/>

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 <https://www.wicell.org/media.acux/ca76d97c-862a-43f3-b02a-ab2d1e619100>. 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.

Native Product Sterility Report



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

SAMPLE #: 19111615
DATE RECEIVED: 21-Nov-19
TEST INITIATED: 26-Nov-19
TEST COMPLETED: 10-Dec-19

SAMPLE NAME / DESCRIPTION: WC051i-FX08-23 WB67327 15143
STAN140i-243C1 WB67329 15144
MIN13i-33362.D WB67326 15145
JHU050i WB67328 15146
WC060i-226-1-2-22 WB67334 15147
WTB DB66964 15148
PENN014i-37-3 DB36309 15149
PENN016i-821-1 DB35119 15150
PENN149i-M1-6 DB36089 15162
PENN151i-M1-5 DB36083 15163

UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	0	2 Negatives

TEST SUMMARY:

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

REFERENCE: Processed according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

REVIEWED BY _____

DATE 11 Dec 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

04Dec19

FORM SOP-CH-048.01

Version A Edition 01

Sample Name	Result	Comments/Suggestions
WISCi014-A-3-WB67355 15178 (79343)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WISCi014-A-1-WB67353 15179 (79344)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WISCi014-A-2-WB67354 15180 (79345)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC061i-226-1-2-23-WB67359 15174 (79346)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC170 02Dec19 MMM (79347)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 02Dec19 KR (79348)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC149 02Dec19 AP (79349)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENNI49i-M1-6-DB36089 15171 (79350)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENNI15i-M1-5-DB36083 15172 (79351)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC063i-247-1-2-18-DB67336 15177 (79352)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC064i-247-1-2-22-DB67337 15181 (79353)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC066i-310-17-2-27-DB67341 15176 (79354)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC067i-310-17-2-33-DB67342 15182 (79355)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC069i-335-1-2-28-DB67344 15175 (79356)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC070i-335-1-2-30-DB67345 15183 (79357)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Molly Miles, Cell Culture Specialist

Reviewed by: Katie Remondini, Cell Culture Specialist

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.

A gel image is available upon request.