



Thaw and Culture Details

Cell Line Name	PENN041i-177-46
WiCell Lot Number	DB34934
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 Vialied	21-July-2015
Vial Label	iPS-177 Sev46 P16 07-21-15 JS
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	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
23-June-2016	<p style="text-align: right;">8/30/2019</p> <p>X JKG</p> <hr/> <p><small>WiCell Quality Assurance Signed by: Gay, Jenna</small></p>

Date Reported: Monday, August 19, 2019
Cell Line: PENN041i-177-46-DB34934 14943
Passage#: 17
Date of Sample: 8/9/2019
Specimen: Human IPSC
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: lot release testing
Investigator: [REDACTED], WiCell



Cell: 46
Slide: G02
Slide Type: Karyotype
Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 350 - 475

Interpretation:

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

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

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.

Short Tandem Repeat Analysis

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

characterization@wicell.org
 (608) 316-4145

Sample Report:
 14943-STR
Sample Name on Tube: 14943-STR
 27.0 ng/μL, (A260/280=3.21)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
 WiCell Research Institute
 Quality Assurance Department

Receive Date: 08/12/19
Report Sent: 08/21/19
Assay Date: 08/19/19
File Name: STR 190820 wmr
Report Date: 08/21/19

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 14943-STR cells submitted by WiCell QA dated and received on 08/12/19, this sample (Label on Tube: 14943-STR) defines the STR profile of the human cell line PENN041i-177-46 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human PENN041i-177-46 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 14943-STR sample submitted corresponds to the PENN041i-177-46 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 08/21/19

X *WMR*

Digitally Signed on 08/21/19

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

██████████, PhD, Director / Co-Director
 UWMC 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 #: 19080059
DATE RECEIVED: 01-Aug-19
TEST INITIATED: 02-Aug-19
TEST COMPLETED: 16-Aug-19

SAMPLE NAME / DESCRIPTION: SCRP2310i DB42060 14929
 SCRP2307i DB42057 14930
 SCRP2407i DB42063 14931
 SCRP2508i DB42079 14932
 STAN357i-298C2 DB44224 14933
 STAN359i-442C11 DB44237 14934
 PENN025i-71-58 DB35127 14935
 PENN041i-177-46 DB34934 14936
 STAN378i-886C4 DB44665 14937
 STAN275i-732C1 DB35789 14938

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 16 Aug 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

Lot Release Testing

02Aug19

FORM SOP-CH-044.03

Version B Edition 02

#	Sample Name	Result	Comments/Suggestions
1	PENN041i-177-46-DB34934 14943	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Brenna Anderson, Research Specialist - Cytogenetics

Reviewed by: Anna Lisa Larson, Laboratory Supervisor- Characterization

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A gel image is available upon request.