

Thaw and Culture Details

Cell Line Name	PENN004i-277-1		
WiCell Lot Number	DB36075		
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 1 well of a 6 well plate using Stem Cell Culture Medium and MEF. WiCell recommends thawing using ROCK Inhibitor for best results.		
Protocol	WiCell Feeder Based (MEF) Pluripotent Stem Cell Protocol		
Culture Platform Prior to Freeze	Feeder Dependent		
	Medium: Stem Cell Culture Medium		
	Matrix: MEF		
Passage Number	p13 These cells were cultured for 13 passages prior to freeze and post colony picking. Therefore, plated cells at thaw should be labeled passage 14.		
Date Vialed	14-July-2015		
Vial Label	iPS-277 SEV1 P13 7/14/2015 ZL		
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

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Test Description	Test Provider	Test Method	Test Specification	Result
	WiCell	SOP-49	Expected karyotype	See Report
Karyotype by G-banding	Results: 46,XY Nonclonal findings: 46,XY,del(1)(q32) Interpretation: This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution. There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.			
Post-Thaw Viable Cell Recovery	WiCell	SOP-99	Recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega	Defines STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-79	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 (MEGAEX)



Approval Date	Quality Assurance Approval	
23-June-2016	JKG JKG Quality Assurance Signed by Gay, Jenna	



Chromosome Analysis Report: 083092

Male

WiCell Stem Cell Bank, WiCell

Reason for Testing: LOT_RELEASE

Cell Line Sex:

Investigator:

Date Reported: Tuesday, October 13, 2020

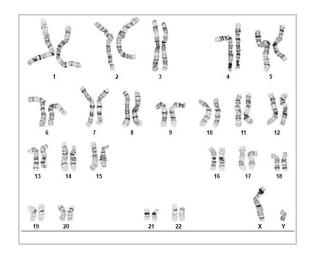
Cell Line: PENN004i-277-1-DB36075

Submitted Passage #: 15
Date of Sample: 10/1/2020

Specimen: Human IPSC

Results: 46,XY

Nonclonal findings: 46,XY,del(1)(q32)



Cell: 3

Slide: G01

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 9

Total Karyogrammed: 5

Band Resolution: 425 - 500

Interpretation:

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

There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

Date:	Sent By:	Sent To:	QC Review By:
Reviewed and Interpreted by:		, Ph.D.	
Completed by:	,	CG(ASCP)	

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

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 29Sep20, 06Oct20 STR Amplification Date: 08Oct20

Sample Name	CREM004i-SS2-1- WB67570 p14	H9-hTnnT2-pGZ-TD2- WB67569 p40	PENN004i-277-1- DB36075 p14		
Label on tube	83042	83043	83151		
FGA	03042	03043	03131		
TPOX					
D8S1179		Identifying			
vWA		information has			
Amelogenin		been redacted to			
Penta_D	protect donor				
CSF1PO					
D16S539					
D7S820					
D13S317					
D5S818		contact WiCell's Technical			
Penta E		Support.			
D18S51					
D18551 D21S11					
TH01					
D3S1358					
			2.6		
Allelic Polymorphisms	27	24	26		
Matches*	67489				
Comments					

*Note: The STR profile of the following sample is an exact match for the given sample/samples.





Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 29Sep20, 06Oct20 STR Amplification Date: 08Oct20

ResultsThe genotypic profiles comprise a range of <u>24-27</u> allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> 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. These results suggests that the cells submitted correspond to the cell lines as named and were 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%.

Tech #1
Characterization
Signed by:

10/9/2020

10/13/2020

X

A Review
QA Review
Quality Assurance
Signed by:

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Raw data is available upon request.

Native Product Sterility Report



SAMPLE #: 19100858

DATE RECEIVED: 10-Oct-19

TEST INITIATED: 16-Oct-19

TEST COMPLETED: 30-Oct-19

SAMPLE NAME / DESCRIPTION: WC059i-108-1-2-19 WB67322 15075

WC057i-108-1-2-02 WB67323 15076

PENN003i-661-4 DB36301 15058 PENN004i-277-1 DB36075 15059

SCRP8401i DB43123 15048 SCRP9602i DB43150 15049

MCW030i-A2688 WB67307 15050 MCW020i-A2023 WB67311 15054 WC024i-FXS-Nluc1 WB67318 15055 WC053i-FX08-25 WB67320 15057

UNIQUE IDENTIFIER: NA

TEST RESULTS:

WiCell

504 S Rosa Road, Rm 101

Madison, WI 53719

# 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 310 CT (9

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

FORM SOP-83.01 Version 01

PCR-based assay performed by WiCell WiCell 16Sep20

Sample Name	Result	Comments/Suggestions
INC149 08Sep20 AP (82819)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WAi001-B-1-iETV2-DB67533 (82859)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 09Sep20KR (82864)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN270i-720C3-DB44433 (82868)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN004i-277-1-DB36075 (82871)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN058i-285-3-DB34799 (82872)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
H13-FMR1-FLAG-DB67479 (82877)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WISCe011-A-39-WB67548 (82881)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN09i-33114.C.B-WB67531 (82882)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Research Specialist
Reviewed by: Assistant Research Specialist

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A gel image is available upon request.