Thaw and Culture Details

Cell Line Name	**PENN138i-24-4**
WiCell Lot Number	**DB34721**
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	p12 These cells were cultured for 12 passages prior to freeze and post colony picking. Therefore, plated cells at thaw should be labeled passage 13.
Date Vialed	24-March-2015
Vial Label	iPS-24-1311 Sev4 P12 03-24-15 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-49	Expected karyotype	See Report
	Results: 46,XY,del(6)(p21) ***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 (MEGA^{EX})

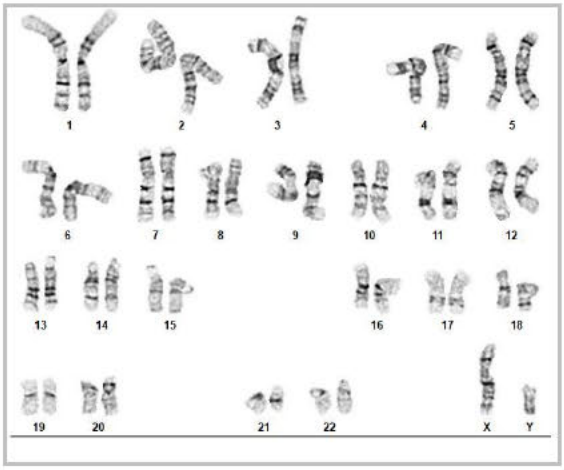
Approval Date	Quality Assurance Approval
27-June-2016	10/8/2020 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Chromosome Analysis Report: 082835

Date Reported: Wednesday, September 16, 2020
Cell Line: PENN138i-24-4-DB34721
Submitted Passage #: 15
Date of Sample: 9/9/2020
Specimen: Human IPSC
Results: 46,XY

Cell Line Sex: Male
Reason for Testing: LOT_RELEASE
Investigator: WiCell Stem Cell Bank, WiCell

Nonclonal findings: 46,XY,del(6)(p21)



Cell: 19
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 475

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.

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".

Short Tandem Repeat

Requestor: WiCell
Samples Received: 09Sep20
STR Amplification Date: 16Sep20

Sample Name	PENN138i-24-4-DB34721	PENN060i-23-1-DB34969
Label on tube	82835	82836
FGA	[redacted]	
TPOX		
D8S1179		
vWA		
Amelogenin		
Penta_D		
CSF1PO		
D16S539		
D7S820		
D13S317		
D5S818		
Penta_E		
D18S51		
D21S11		
TH01		
D3S1358		
Allelic Polymorphisms	26	26
Matches*		
Comments		

Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support.

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

[1]Microvariant seen at Penta D locus, base pair size 393.65.

Short Tandem Repeat

Requestor: WiCell
Samples Received: 09Sep20
STR Amplification Date: 16Sep20

Form SOP-89.01
Version 1.0

ResultsThe genotypic profiles comprise a range of ___26__ allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: 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%.

9/22/2020

X [redacted]

Tech #1
Characterization
Signed by: [redacted]

9/22/2020

X [redacted]

Tech #2
Characterization
Signed by: [redacted]

9/23/2020

X [redacted]

QA Review
Quality Assurance
Signed by: [redacted]

Raw data is available upon request.

Native Product Sterility Report

STERIS

SAMPLE #:	20081640
DATE RECEIVED:	27-Aug-20
TEST INITIATED:	02-Sep-20
TEST COMPLETED:	16-Sep-20

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

SAMPLE NAME / DESCRIPTION:
PENN062i-278-2-DB34984
PENN086i-278-1-DB34737
PENN138i-24-4-DB34721
PENN060i-23-1-DB34969
CCHMC 0336-001-02 CLONE #38 (82488)
CCHMC 0336-001-02 CLONE #60 (82489)
CCHMC 0344-001-08 CLONE #32 (82490)
CCHMC 0344-001-08 CLONE #69 (82491)

H13-FMR1-KO-WB67530
SCRP0709i-DB42028

UNIQUE IDENTIFIER: N/A

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	0	3 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 29SEP2020

Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell

19Aug20

FORM SOP-83.01
Version 01

Sample Name	Result	Comments/Suggestions
PENN022i-89-1-DB36532 (82387)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN060i-23-1-DB34969 (82388)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN062i-278-2-DB34984 (82389)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN086i-278-1-DB34737 (82390)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN138i-24-4-DB34721 (82391)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN215i-490C3-WB67522 (82392)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC 123 17Aug20KR (82399)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: [redacted]**, Assistant Research Specialist**
Reviewed by: [redacted]**, Cell Culture Specialist**

A gel image is available upon request.