



Thaw and Culture Details

Cell Line Name	JHU053i
WiCell Lot Number	DB36209
Provider	Johns Hopkins University – Laboratory of Dr. Lewis Becker
Banked By	Johns Hopkins University – Laboratory of Dr. Lewis Becker
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using TeSR™-E8™ and Recombinant Human Vitronectin. WiCell recommends thawing using ROCK Inhibitor for best results.
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol
Culture Platform Prior to Freeze	Feeder Independent
	Medium: E8
	Matrix: Vitronectin
Passage Number	p5 These cells were cultured for 5 passages post reprogramming prior to freeze. Add +1 to the passage number to best represent the overall passage number of the cells at thaw.
Date Viald	23-February-2016
Vial Label	P053 P5 1x10 ⁶ 2/23/16
Biosafety and Use Information	This cell line is of human origin. 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(18)(q21.3)[6]/47,XY,+mar[4]/46,XY[10] Interpretation: This is an abnormal karyotype. There are two unrelated abnormal clones. The cells in the predominant clone (six of twenty cells examined; representative image on the right) contain a terminal deletion of the long (q) arm of chromosome 18. Loss of chromosome 18q is recurrently acquired in pluripotent stem cell cultures. The cells in the secondary clone (four of twenty cells examined; representative image on the left) contain an additional structurally abnormal chromosome (marker, “mar”) that cannot be identified by G-banded karyotyping. Additional testing is recommended to aid in identification of the marker chromosome. No other clonal abnormalities were detected at the stated band level of resolution.			
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.

- Embryoid bodies
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

Approval Date	Quality Assurance Approval
08-July-2016	<div>2/11/2021</div> <div>X JKG</div> <div>JKG</div> <div>Quality Assurance</div> <div>Signed by: Gey, Jenna</div>

Date Reported: Friday, January 15, 2021

Cell Line Sex: Male

Cell Line: JHU053i-DB36209

Reason for Testing: LOT_RELEASE

Submitted Passage #: 6

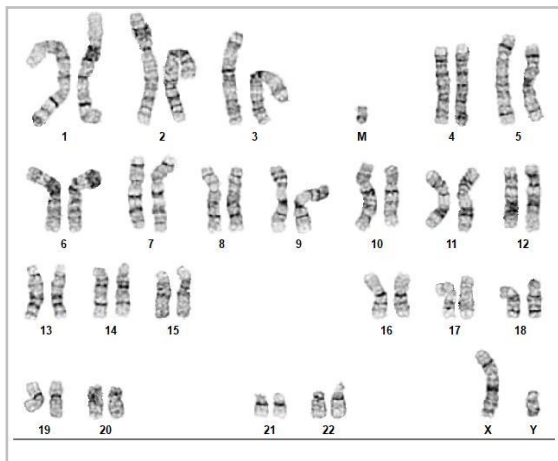
Date of Sample: 1/11/2021

Investigator: WiCell Stem Cell Bank, WiCell

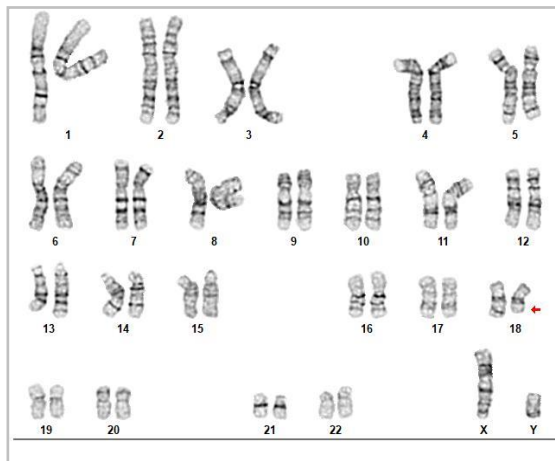
Specimen: Human IPSC

Results: 46,XY,del(18)(q21.3)[6]/47,XY,+mar[4]/46,XY[10]

Cell: 18 **Slide:** G02 **Slide Type:** Karyotyping



Cell: 44 **Slide:** G01 **Slide Type:** Karyotyping



Total Counted: 20

Total Analyzed: 9

Total Karyogrammed: 5

Band Resolution: 425 - 525

Interpretation:

This is an abnormal karyotype. There are two unrelated abnormal clones.

The cells in the predominant clone (six of twenty cells examined; representative image on the right) contain a terminal deletion of the long (q) arm of chromosome 18. Loss of chromosome 18q is recurrently acquired in pluripotent stem cell cultures.

The cells in the secondary clone (four of twenty cells examined; representative image on the left) contain an additional structurally abnormal chromosome (marker, "mar") that cannot be identified by G-banded karyotyping. Additional testing is recommended to aid in identification of the marker chromosome.

No other 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

Case #: 084425

Cell Line: JHU053i-DB36209

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

Form SOP-89.01

Version 3.0

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21

STR Amplification Date: 25Jan21, 28Jan21

Sample Name	JHU053i- DB36209 p6	JHU157i- DB36352 p16	EMe-TPint5GCA5- DB67600 p40	EMe-TPint5GCC1- DB67601 p40	MIN28i-35833.A- WB67616 p14	MIN29i-35833.B- WB67612 p12	WA09-WB67614 p26
Label on tube	84425	84426	84447	84448	84468	84469	84476
FGA	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org						
TPOX							
D8S1179							
vWA							
Amelogenin							
Penta_D							
CSF1PO							
D16S539							
D7S820							
D13S317							
D5S818							
Penta_E							
D18S51							
D21S11							
TH01							
D3S1358							
Allelic Polymorphisms	27	26	24	24	25	25	24
Matches*							See Matches Comment
Comments							

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



Short Tandem Repeat

Form SOP-89.01

Version 3.0

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21

STR Amplification Date: 25Jan21, 28Jan21

Sample Name	WA09-WB67615 p26	MIN30i- 33109.2G- WB67613 p35	MIN27i-35326.K- WB67617 p10	MIN26i-35326.I- WB67609 p26	BWHi009- WB66301 p180	MIN25i-35613.SF- 1-WB67607 p17	EMe-TPint5GC42- DB67599 p39
Label on tube	84477	84496	84531	84534	84550	84551	84552
FGA	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org						
TPOX							
D8S1179							
vWA							
Amelogenin							
Penta_D							
CSF1PO							
D16S539							
D7S820							
D13S317							
D5S818							
Penta_E							
D18S51							
D21S11							
TH01							
D3S1358							
Allelic Polymorphisms	24	26	29	34	28	26	24
Matches*	See Matches Comment						
Comments				¹ See Triploid Genotype Comment			

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



Short Tandem Repeat

Form SOP-89.01

Version 3.0

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21

STR Amplification Date: 25Jan21, 28Jan21

Sample Name	EMe-TPint5GC23-DB67598 p40
Label on tube	84553
FGA	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org
TPOX	
D8S1179	
vWA	
Amelogenin	
Penta_D	
CSF1PO	
D16S539	
D7S820	
D13S317	
D5S818	
Penta_E	
D18S51	
D21S11	
TH01	
D3S1358	
Allelic Polymorphisms	24
Matches*	
Comments	

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



Short Tandem Repeat

Form SOP-89.01

Version 3.0

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21

STR Amplification Date: 25Jan21, 28Jan21

Results: The genotypic profiles comprise a range of 24-34 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%.

¹Triploid Genotype: A triploid genotype was detected at the vWA, Penta_D, D16S539, Penta_E, and D18S51 loci. This observation could be the result of chromosomal gain, loss, and/or amplification in this cell line.

Matches: Samples 84476 and 84477 are exact matches to each other and to 14630, 74319, 74844, 74924, 74925, 83593, 84032, 84034, and 84095.

2/8/2021

2/8/2021

2/8/2021

X

Tech #1
Characterization
Signed by: [redacted]

X

Tech #2
Characterization
Signed by: [redacted]

X

QA Review
Quality Assurance
Signed by: [redacted]

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Raw data is available upon request.

Native Product Sterility Report



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

SAMPLE #: 21010718
DATE RECEIVED: 14-Jan-21
TEST INITIATED: 20-Jan-21
TEST COMPLETED: 03-Feb-21

SAMPLE NAME / DESCRIPTION: BWHi009-WB66301
PENN038i-366-6-DB36313
JHU042i-DB41048
JHU133i-DB41335
JHU053i-DB36209
JHU157i-DB36352
JHU233i-DB37038
JHU214i-WB67611
WA09-WB67614
WA09-WB67615
UNIQUE IDENTIFIER: N/A

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 04 FEB 2021

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

13Jan21

FORM SOP-83.01

Version 2.0

Sample Name	Result	Interpretation
MIN27i-35326.K-DB67585 (84386)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN28i-35833.A-DB67586 (84387)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN29i-35833.B-DB67587 (84388)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN30i-33109.2G-DB67588 (84389)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU042i-DB41048 (84391)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU053i-DB36209 (84392)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU133i-DB41335 (84393)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU157i-DB36352 (84394)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU233i-DB37038 (84395)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN245i-601C4-WB67605 (84403)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN366i-282C2-WB67606 (84404)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN274i-729C2-WB67604 (84411)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN24i-35613.B-WB67610 (84414)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPint5GCC1-DB67601 (84416)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPint5GCA5-DB67600 (84417)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPR208X12-DB67602 (84418)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPR208X25-DB67603 (84419)	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], Senior Cell Culture Specialist

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A gel image is available upon request.