Thaw and Culture Details

Cell Line Name	MIN11i-33360.B
WiCell Lot Number	WB20012
Provider	Massachusetts General Hospital
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 4 wells of a 6 well plate.
Culture Platform	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 Protocol
Passage Number	p19 These cells were cultured for 18 passages prior to freeze. WiCell adds +1 to the passage number at freeze so that the number on the vial best represents the overall passage number of the cells at thaw.
Date Vialed	03-June-2015
Vial Label	MIN11i-33360.B p19 WB20012
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
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	≥ 15 Undifferentiated Colonies, ≤ 30% Differentiation and recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines profile	Pass
Sterility	Biotest Laboratories	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-QU-004	Negative	Pass
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype[1]	Pass

[1]This is the first karyotype of this cell line.

Testing Reported by Provider

Test Description & Method	Result
Embryoid Body Formation	RT(q)PCR (Brachyury, GATA2 - Meso; AFP, Sox17 - Endo; Pax6, MAP2 - Ectoderm)
Teratoma	Teratama Formed
Pluripotency Markers; AP, Oct4, Nanog, SSEA-3, SSEA-4, TRA1-60	All Markers Expressed

Approval Date	Quality Assurance Approval
09-October-2015	6/24/2016 X AMK AMK Quality Assurance Signed by: Klade, Anjelica

Short Tandem Repeat Analysis

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON
Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
http://www.pathology.wisc.edu/research/trip

WiCell®
info@wicell.org
(888) 204-1782

Sample Report:
11642-STR
Sample Name on Tube: 11642-STR
55.1 ng/µL, (A260/280=1.82)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
WiCell Research Institute
Quality Department

Sample Date: N/A
Receive Date: 05/11/16
Assay Date: 05/17/16
File Name: STR 160518 wmr
Report Date: 05/23/16

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	

<u>Results:</u> Based on the 11642-STR cells submitted by WiCell QA dated and received on 05/11/16, this sample (Label on Tube: 11642-STR) defines the STR profile of the human stem cell line MIN11i-33360.B comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human MIN11i-33360.B stem 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 11642-STR sample submitted corresponds to the MIN11i-33360.B stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity:</u> Sensitivity limits for detection of STR polymorphisms unique to either this or other human stem cell lines is ~2-5%.

X *RMB* **Digitally Signed on 05/23/16**

[redacted]
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 05/23/16**

[redacted], *PhD, Director / Co-Director*
UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Sterility Report

Biotest Laboratories, Inc.
Making life-saving products possible

WiCell Research Institute, Inc.
WiCell Quality Assurance
[redacted]

BIOTEST SAMPLE # 15111558

VALIDATION # NG

TEST PURPOSE NG

PRODUCT	WA28-WB25835 11480, WA31-WB25836 11481, WA36-WB25808 11482 WA39-WB26020 11483, WA42-WB25838 11484, WA45-WB25712 11485 MIN10i-33360.A-WB20014 11486, MIN11i-33360.B-WB20012 11487 MIN13i-33362.D-WB19561 11488, MIN18i-33811.A-WB20022 11489		
PRODUCT LOT	NA		
STERILE LOT	NA	BI LOT	NA
STERILIZATION LOT	NA	BI EXPIRATION DATE	NA
STERILIZATION DATE	NA	DATE RECEIVED	2015-11-18
STERILIZATION METHOD	NA	TEST INITIATED	2015-11-25
SAMPLING BLDG / ROOM	NA	TEST COMPLETED	2015-12-09

REFERENCE Processed according to LAB-003: Sterility Test Procedure

Ten (10) products were each cultured in 40 mL TSB at 20-25 C and 10 products were each cultured in 40 mL FTG at 30-35 C and monitored for a minimum of 14 days.

- ☒ USP
- ☐ BI Manufacturers Specifications
- ☐ Other

RESULTS	# POSITIVES	# TESTED	POSITIVE CONTROL	NEGATIVE CONTROL
Sterile	0	10	NA	2 Negatives

COMMENTS NA

REVIEWED BY [redacted] DATE 09DEC15

Mycoplasma Detection Assay Report

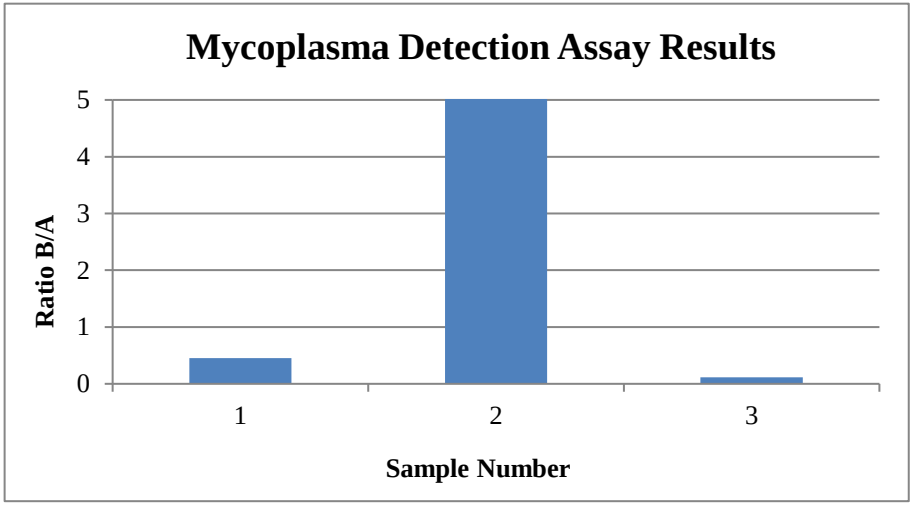
Testing Performed by WiCell

Lot Release Testing

May 6th, 2016

FORM SOP-QU-004.01
Version E Edition 01
Reported by: SS
Reviewed by: JB
Berthold Flash n' Glo 539

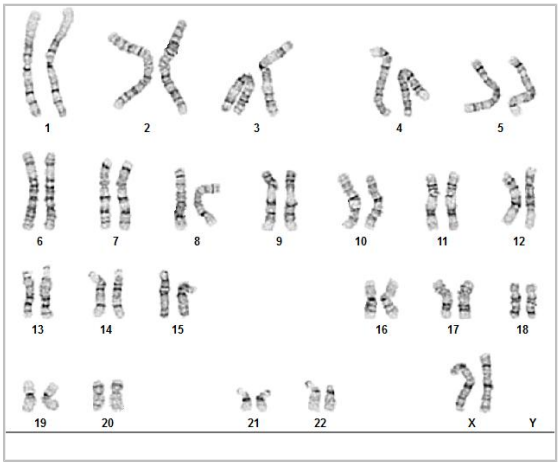
#	Sample Name	Reading A		A	Reading B		B	Ratio	Result	Comments/Suggestions
		RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A		
1	MIN11i-33360.B-WB20012 11642	125	119	122	55	55	55	0.45	Negative	
2	Positive (+) Control	225	238	231.5	19246	19260	19253	83.17	Positive	
3	Negative (-) Control	342	336	339	40	37	38.5	0.11	Negative	



Chromosome Analysis Report: 033650

Date Reported: Friday, May 06, 2016
Cell Line: MIN11i-33360.B-WB20012 11642
Passage#: 19
Date of Sample: 5/2/2016
Specimen: iPSC
Results: 46,XX

Cell Line Gender: Female
Reason for Testing: Lot release testing
Investigator: [redacted], CDM



Cell: 43
Slide: 2
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 525

Interpretation:

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

Completed by: [redacted]utter, CG(ASCP)
Reviewed and Interpreted by: [redacted], PhD, FACMG
A signed copy of this report is available upon request.

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 may not be relied upon by any other party without the prior written consent of the Director of the WiCell Cytogenetics Laboratory. The resu lts of this assay are for research use only. If the results of this assay are to be used for any other purpose, contact the Director of the WiCell Cytogenetics Laboratory.

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