



Thaw and Culture Details

Cell Line Name	EMe-TPint5GC23
WiCell Lot Number	DB67598
Provider	Brown University – Dr. Eric Morrow
Banked By	Brown University – Dr. Eric Morrow
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 5 wells of a 6 well plate using mTeSR™Plus/Matrigel®.
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol
Culture Platform Prior to Freeze	Feeder Independent
	Medium: mTeSR™Plus
	Matrix: Matrigel®
Passage Number	p39 These cells were cultured for 38 passages prior to freeze. Cells were modified at passage 31. Therefore, plated cells at thaw should be labeled passage 39.
Date Vialied	03-September-2020
Vial Label	H9 TPP1 INT5 SA#23 P39 9/3/20
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
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

Approval Date	Quality Assurance Approval
11-February-2021	2/11/2021 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Date Reported: Friday, January 29, 2021

Cell Line: EMe-TPint5GC23-DB67598

Submitted Passage #: 40

Date of Sample: 1/26/2021

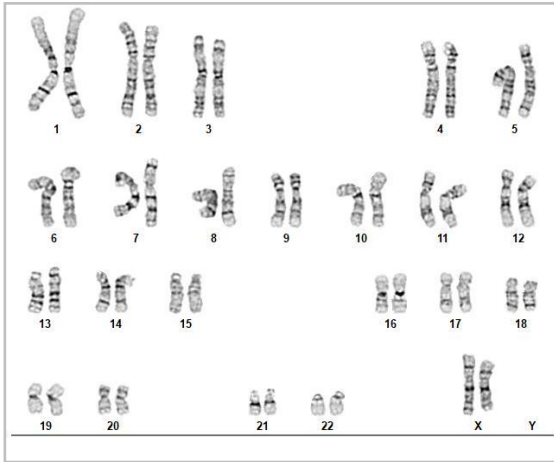
Specimen: Human Modified ESC

Results: 46,XX

Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 53

Slide: G01

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 425 - 475

Interpretation:

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

Completed by: [REDACTED], CG(ASCP)

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

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	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org						
FGA							
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	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org						
FGA							
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	26, 28
TPOX	10, 11
D8S1179	8, 14
vWA	17, 17
Amelogenin	X, X
Penta_D	9, 13
CSF1PO	11, 11
D16S539	12, 13
D7S820	9, 11
D13S317	9, 9
D5S818	11, 12
Penta_E	11, 14
D18S51	13, 13
D21S11	30, 30
TH01	9.3, 9.3
D3S1358	13, 16
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

X

Tech #1
Characterization
Signed by: [redacted]

2/8/2021

X

Tech #2
Characterization
Signed by: [redacted]

2/8/2021

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 #: 20121700
DATE RECEIVED: 29-Dec-20
TEST INITIATED: 04-Jan-21
TEST COMPLETED: 18-Jan-21

SAMPLE NAME / DESCRIPTION: STAN274i-729C2-WB67604
STAN366i-282C2-WB67606
STAN245i-601C4-WB67605
GCT27C4-DB67566
GCT27DC1-DB67567
MIN24i-35613.B-WB67610
MIN25i-35613.SF-1-WB67607
MIN26i-35326.I-WB67609
JHU114i-DB36253
SCR5402i-WB67608
EMe-TPint5GC23-DB67598
EMe-TPint5GC42-DB67599
EMe-TPint5GCA5-DB67600
EMe-TPint5GCC1-DB67601
EMe-TPR208X12-DB67602
EMe-TPR208X25-DB67603
PENNO26i-124-1-DB34876
PENNO27i-40-2-DB36452
JHU090i-DB41248
JHU127i-DB36261

UNIQUE IDENTIFIER: N/A

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
20	0	2 Negatives

TEST SUMMARY:

# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
20	TSB	40	20-25	14
20	FTG	40	30-35	14

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

Native Product Sterility Report



COMMENTS: Sample #20121700

REVIEWED BY

A handwritten signature in blue ink, appearing to read "J. L. H.", written over a horizontal line.

DATE 20 JAN 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

27Jan21

FORM SOP-83.01

Version 2.0

Sample Name	Result	Interpretation
WA09-WB67614 p26 (84476)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WA09-WB67615 p26 (84477)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN30i-33109.2G-WB67613 p35 (84496)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN32i-33109.2B.3A12-DB67579 (84497)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN33i-33109.2G.1A4-DB67580 (84498)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN34i-33109.2G.2F2-DB67581 (84499)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC169 21Jan21MMM 1 of 2 (84500)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC169 21Jan21MMM 2 of 2 (84501)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 21Jan21KR 1 of 2 (84502)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 21Jan21KR 2 of 2 (84503)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN27i-35326.K-WB67617 p10 (84531)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN26i-35326.I-WB67609 p26 (84534)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN31i-33363.D.3C2-DB67578 p22 (84540)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPint5GC42-DB67599 p39 (84541)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPint5GC23-DB67598 p40 (84542)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
GCT27C4-DB67566 p6 (84543)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
GCT27DC1-DB67567 p8 (84544)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: [REDACTED], Assistant Cell Culture Specialist

Reviewed by: [REDACTED], Senior Cell Culture Specialist

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A gel image is available upon request.