



Thaw and Culture Details

Cell Line Name	H9-hTnnT2-pGZ-TD2
WiCell Lot Number	WB67569
Parent Material	H9-hTnnT2-pGZ-TD2-WB0042
Provider	University of Wisconsin – Laboratory of Dr. Timothy Kamp
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using mTeSR™1 and Matrigel®.
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol
Culture Platform Prior to Freeze	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Passage Number	p40 These cells were cultured for 39 passages prior to freeze and post colony selection. WiCell adds +1 to the passage number at freeze to best represent the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 40.
Date Vial	23-September-2020
Vial Label	H9-hTnnT2-pGZ-TD2 p40 WB67569
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	≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega	Consistent with STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-79	Negative	Pass

Approval Date	Quality Assurance Approval
18-November-2020	<div>11/18/2020</div> <div>X JKG</div> <div>JKG Quality Assurance Signed by: Gay, Jenna</div>

Date Reported: Tuesday, October 6, 2020

Cell Line: H9-hTnnT2-pGZ-TD2-WB67569

Submitted Passage #: 40

Date of Sample: 9/29/2020

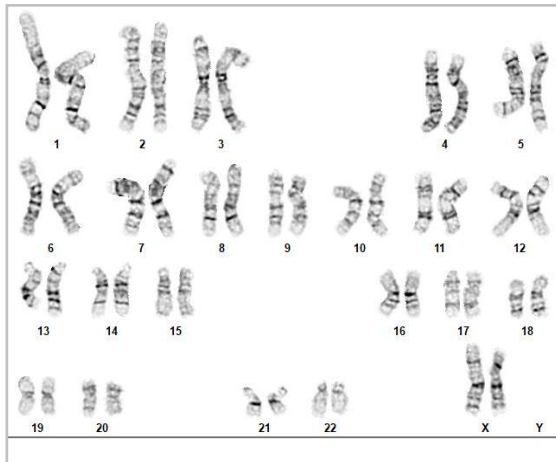
Specimen: Human Modified ESC

Results: 46,XX

Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 6

Slide: G02

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 425 - 500

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

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 29Sep20, 06Oct20

STR Amplification Date: 08Oct20

Form SOP-89.01

Version 1.0

Sample Name	CREM004I-SS2-1- WB67570 p14	H9-h1nn12-pGZ-1D2- WB67569 p40	PENN004I-277-1- DB36075 p14
Label on tube	83042	83043	83151
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	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

Form SOP-89.01
Version 1.0

Results The genotypic profiles comprise a range of 24-27 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%.

10/9/2020

X [Redacted]

Tech #1
Characterization
Signed by: [Redacted]

10/13/2020

X [Redacted]

Tech #2
Characterization
Signed by: [Redacted]

10/12/2020

X [Redacted]

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 #: 20100832
DATE RECEIVED: 15-Oct-20
TEST INITIATED: 22-Oct-20
TEST COMPLETED: 04-Nov-20

SAMPLE NAME / DESCRIPTION: CREM004i-SS2-1-WB67570
H9-hTnnT2-pGZ-TD2-WB67569

MIN22i-33113.2I-WB67571
CRFi001-A-WB67573
CRFi002-A-WB67572
SCRp1103i-DB42716
SCRp1203i-DB42719
SCRp1307i-DB42723

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 10 Nov 2020

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
06Oct20

FORM SOP-83.01

Version 01

Sample Name	Result	Comments/Suggestions
CREM004i-SS2-1-WB67570 (83042)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
H9-hTnnT2-pGZ-TD2-WB67569 (83043)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CRFi002-A-DB67541 (83110)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC149 02OCT20 AP (83116)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC169 MMM 03Oct20 1/3 (83131)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC169 MMM 03Oct20 2/3 (83132)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC169 MMM 03Oct20 3/3 (83133)	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.