Certificate of Analysis

Thaw and Culture Details

Cell Line Name	**H1 MYH11-NLuc-tdTomato**	
WiCell Lot Number	**WB68133**	
Banked By	WiCell	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 2 well of a 6 well plate TeSR™-E8™ and Cultrex®.	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: TeSR™-E8™	Matrix: Cultrex®
Passage Number	p32 Cells were cultured for 31 passages prior to freeze. Cells were modified at passage 21. Plated cells at thaw should be labeled passage 32.	
Date Vialed	15-June-2023	
Vial Label	H1 MYH11-NLuc-tdTomato p32 WB68133	
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.	

Certificate of Analysis

Results

Test Description	Test Provider	Test Method	Test Specification	Result
Karyotype	WiCell	G-T-L Banding performed on 20 metaphase cells	Expected karyotype	See Report
	Results: 46,XY ***Interpretation:*** This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.			
Post-Thaw Viable Cell Recovery	WiCell	Thaw using specified Thaw & Culture Recommendations	≥ 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™	Defines STR profile of deposited cell line	See Report
Mycoplasma	WiCell	PCR	Amplification of mycoplasma specific DNA detected with negative result	Pass
Sterility	Steris	Native Product Direct Transfer using FTM and TSB (ST/07)	Negative for growth following 14 days of culture	Pass

Approval Date	WiCell Quality Assurance Approval
09-August-2023	11/9/2023 X Ryen Smith HEB WiCell Quality Assurance Signed by: Smith, Ryen

Chromosome Analysis Report: 097828

Date Reported: Friday, July 14, 2023

Cell Line: H1 MYH11-NLuc-tdTomato-WB68133

Submitted Passage #: 32

Date of Sample: 7/9/2023

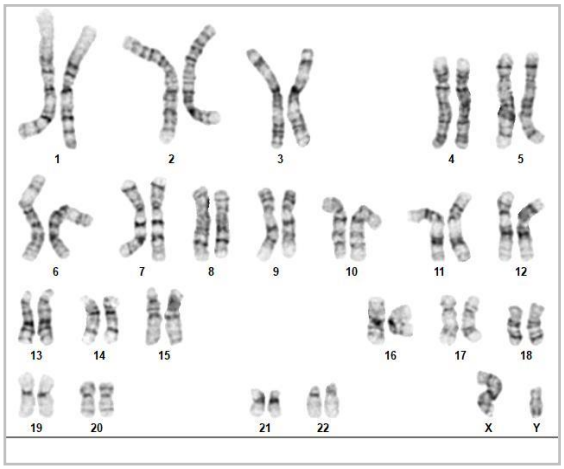
Specimen: Human Modified ESC

Results: 46,XY

Cell Line Sex: Male

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 6

Slide: G01

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 9

Total Karyogrammed: 5

Band Resolution: 400 - 500

Interpretation:

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

Completed by: Erica Schutter, CG(ASCP)

Reviewed and Interpreted by: Vanessa Horner, PhD, FACMG

For internal use only

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 Stem Cell Bank, WiCell
Samples Received: 09Jul23
STR Amplification Date: 20Jul23

Sample Name	H1 MYH11-NLuc-tdTomato-WB68133 p32
WiCell CTR No.[1]	97828
FGA	20, 24
TPOX	8, 11
D8S1179	12, 13
vWA	15, 17
Amelogenin	X, Y
Penta_D	10, 13
CSF1PO	12, 13
D16S539	9, 13
D7S820	8, 12
D13S317	8, 11
D5S818	9, 11
Penta_E	10, 12
D18S51	17, 18
D21S11	28, 32.2
TH01	9.3, 9.3
D3S1358	15, 15
Allelic Polymorphisms	28
Matches*	See Matches Comment
Comments	

**Note: The STR profile of the following sample is a 100% match for the given sample/samples unless otherwise specified.*

[1] CTR No.: Characterization Test Request Number; also known as a laboratory accessioning number.

Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell
Samples Received: 09Jul23
STR Amplification Date: 20Jul23

Form SOP-89.01
Version 10.0

Assay Description: STR analysis is performed using the PowerPlex 16 HS System by Promega™. Results are reported as 13 CODIS STR markers, Amelogenin for gender determination and two low-stutter, highly discriminating pentanucleotide STR markers.

Results: The genotypic profiles comprise a range of 28 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 ~2-4%.

Matches: Sample 97828 is a 100% match to 97757, 96488, 96463, 94744, 94743, 93806, 86550, 86570, 82881, 82204 and additional profiles. Additional matches can be provided upon request.

7/27/2023 X Kaylie Petersen Tech #1 Characterization Signed by: Petersen, Kaylie	7/27/2023 X Amber Kuhn Tech #2 Characterization Signed by: Kuhn, Amber	7/27/2023 X Andy Arntz QA Review Quality Assurance Signed by: Arntz, Andy

Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell Stem Cell Bank, WiCell

18Jul23

Form SOP-83.01
Version 5.0

Sample Name	Result	Interpretation
UCSD243i-LQT3-1-DB68091 p16 (97932)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
UCSD242i-LQT1-1-DB68089 p18 (97931)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
H1 MYH11-NLuc-tdTomato-WB68133 p32 (97828)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Assay Description
Sample is tested for presence of mycoplasma using EZ-PCR™ Mycoplasma Detection Kit (Sartorius).

7/18/2023 X Justin Hobson Tech #1 Characterization Signed by: Hobson, Justin	7/18/2023 X Kaylie Petersen Tech #2 Characterization Signed by: Petersen, Kaylie	7/19/2023 X Dawn Graham QA Review Quality Assurance Signed by: Graham, Dawn

A gel image is available upon request.

Native Product Sterility Report

STERIS

SAMPLE #:	23070508
DATE RECEIVED:	13-Jul-23
TEST INITIATED:	17-Jul-23
TEST COMPLETED:	31-Jul-23

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

SAMPLE NAME / DESCRIPTION:
JHU189i-DB41401
JHU192i-DB36782
JHU215i-DB36857
JHU227i-DB37013
JHU230i-DB37025
JHU081i-DB41140
JHU150i-DB41359
STAN240i-558C3-WB68154
STAN241i-558C4-WB68153
H1 OCT4-EGFP-2A-C.3-WB68155
H1 MYH11-NLuc-tdTomato-WB68133
UCSD247i-LQT1-2-WB68158

UNIQUE IDENTIFIER: N/A

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
12	0	2 Negatives

TEST SUMMARY:

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

REFERENCE: Processed according to LAB-003: Sterility Test Procedure
PD #: 000053
TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

AUTHORIZED BY _____ DATE 02 Aug 2023

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.