Certificate of Analysis

Thaw and Culture Details

Cell Line Name	**WC-24-02-DS-A**	
WiCell Lot Number	**WB68530**	
Parent Material	WC-24-02-DS-A-WB18711	
Provider/Client	University of Wisconsin – Dr. Anita Bhattacharyya	
Banked By	WiCell	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using mTeSR™1 and Cultrex®.	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: mTeSR™1	Matrix: Cultrex®
Passage Number	p22 Cells were cultured for 21 passages prior to freeze. Plated cells at thaw should be labeled passage 22.	
Date Vialed	08-July-2024	
Vial Label	WC-24-02-DS-A p22 WB68530 Store at -135C or colder Made in United States Research Use Only	
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,XX Nonclonal Findings: 47,XX,+4 ***Interpretation:*** This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution. There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.			
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™	Consistent with 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

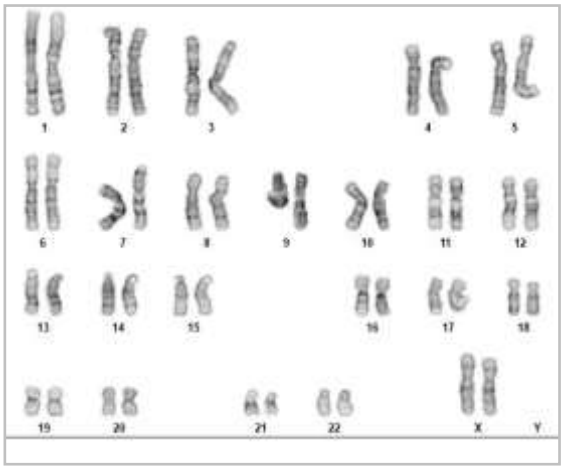
Approval Date	WiCell Quality Assurance Approval
11-September-2024	9/11/2024 X HEB HEB WiCell Quality Assurance Signed by: Bruner, Haley

Chromosome Analysis Report: 103456

Date Reported: August 19, 2024
Cell Line: WC-24-02-DS-A-WB68530
Submitted Passage #: 22
Date of Sample: 8/13/2024
Specimen: Human IPSC
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: LOT_RELEASE
Investigator: WiCell Stem Cell Bank, WiCell

Nonclonal Findings: 47,XX,+4



Cell: 41
Slide: G03
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 350 - 425

Interpretation:

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

There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

Completed by: Korrine Thornell, CG(ASCP)
Reviewed and Interpreted by: Justin Schleede, 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
Sample Receipt Date: 31Jul24
STR Amplification Date: 07Aug24

Sample Name	WC-24-02-DS-A-WB68530 p23
WiCell CTR No.[1]	103288
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	26
Matches[2]	See Results
Comments	

[1] CTR No.: Characterization Test Request Number; also known as a laboratory accessioning number.
[2] The STR profile of the sample(s) listed are a 100% match for the given sample unless otherwise specified.

Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell
Sample Receipt Date: 31Jul24
STR Amplification Date: 07Aug24

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

Results: The genotypic profiles comprise a range of 26 allelic polymorphisms across the 15 STR loci analyzed. Sample 103288 is a 100% match to 103130, 95322, 19124 and a 93.33% match to 102657, 102115, 101953, 101596, 92525, 19513, 19247 and additional profiles. Additional matches can be provided upon request.

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 suggest 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%.

8/8/2024 X Amber Kuhn Tech #1 Characterization Signed by: Kuhn, Amber	8/9/2024 X Anna Lisa Larson Tech #2 Characterization Signed by: Larson, Anna Lisa	8/12/2024 X Hunter Hefti QA Review Quality Assurance Signed by: Hefti, Hunter

Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell Stem Cell Bank, WiCell

05Aug24

Form SOP-83.01
Version 6.0

Sample Name	Result	Interpretation
WC-24-02-DS-A-WB68530 p23 (103288)	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).

8/8/2024 X Kaylie Petersen Tech #1 Characterization Signed by: Petersen, Kaylie	8/8/2024 X John Raff Tech #2 Characterization Signed by: Raff, John	8/8/2024 X Brad Harmening QA Review Quality Assurance Signed by: Harmening, Brad

A gel image is available upon request.

Native Product Sterility Report

STERIS

Accounting@wicell.org
504 S Rosa Road, Rm 101
Madison, WI 53719

SAMPLE #: 24080476
DATE RECEIVED: 15-Aug-24
TEST INITIATED: 16-Aug-24
TEST COMPLETED: 30-Aug-24

SAMPLE NAME / DESCRIPTION:
WC030i-5907-2-WB68495
hiPSC-Tri21-c2-4-WB68517
WC-24-02-DS-A-WB68530
WC-24-02-DS-C-WB68529
hiPSC-Di21-c2-4-4-WB68528
STAN381i-652C1-DB44674
STAN380i-092C2-DB44671
STAN379i-783C6-DB44668
STAN377i-572C5-DB44662
STAN375i-961C1-DB44656
STAN374i-565C4-DB44653
STAN373i-412C4-DB44650
STAN372i-411C8-DB44647
STAN370i-190C3-DB44524

UNIQUE IDENTIFIER: N/A

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
14	3	2 Negatives

TEST SUMMARY:

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

STERIS

COMMENTS: Sample labeled as ISMMS 565i C4 P11 PEC 042016 positive in both media and samples labeled as ISMMS 411i C8 P15 PEC 060316 and ISMMS 961i C1 P10 PEC 060316 positive in TSB

Sample 24080476

AUTHORIZED BY _____ DATE 03SEP2024

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.