



Certificate of Analysis

Thaw and Culture Details

Cell Line Name	CVCL_C7VQ	
WiCell Lot Number	WB68992	
Provider/Client	University of California - Berkeley – Dr. Dirk Hockemeyer	
Banked By	WiCell	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using iSCORE 01 medium and MEF. WiCell recommends thawing using ROCK Inhibitor for best results.	
Protocol	WiCell Feeder Based (MEF) Protocol 01 for Culture of MJFF iSCORE Lines	
Culture Platform Prior to Freeze	Medium: iSCORE 01 medium	Matrix: MEF
Passage Number	p30 Colony selection occurred at passage 20. Cells were cultured for 9 passages prior to freeze and post colony selection. Plated cells at thaw should be labeled passage 30.	
Date Vialed	25-June-2025	
Vial Label	CVCL_C7VQ p30 WB68992 Store at -135C or colder Made in United States Research Use Only	
WiCell	 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.	
Biosafety and Use Information		

The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For clarity, the foregoing is governed solely by WiCell's Terms and Conditions of Service, which can be found at <http://www.wicell.org/privacyandterms>.



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 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
14-January-2026	<p>1/14/2026</p> <p>X Jenna Gay WiCell Quality Assurance Signed by: Gay, Jenna</p>

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Date Reported: August 20, 2025

Cell Line: CVCL_C7VQ-WB68992

Submitted Passage #: 32

Date of Sample: 8/15/2025

Specimen: Human Modified ESC

Results: 46,XX

Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 139

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 375 - 450

Interpretation:

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

Completed by: Dawn Davis, 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".

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

Sample Receipt Date: 07Aug25, 14Aug25, 15Aug25

STR Amplification Date: 18Aug25

Form SOP-89.01

Version 15.0

Sample Name	BCHi015-A-5-DB68706 p20	CVCL_C7VY-WB68973 p39	CVCL_C7VQ-WB68992 p32
WiCell CTR No. ¹	108723	108755	108777
FGA			
TPOX			
D8S1179			
vWA			
Amelogenin			
Penta_D			
CSF1PO			
D16S539			
D7S820			
D13S317			
D5S818			
Penta_E			
D18S51			
D21S11			
TH01			
D3S1358			
Allelic Polymorphisms	29	28	28
Matches ²	108634, 108617	See Results	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: 07Aug25, 14Aug25, 15Aug25
STR Amplification Date: 18Aug25

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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 28 to 29 allelic polymorphisms across the 15 STR loci analyzed. Samples 108755 and 108777 are a 100% match to each other and to 108624, 108613, 108572, 108571, 108531, 108532, 108266, 108053, 107882, 105684, 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%.

8/26/2025	8/26/2025	8/26/2025
X Steph Dos Santos	X Amber Kuhn	X Andy Arntz
Tech #1 Characterization Signed by: Dos Santos, Stephany	Tech #2 Characterization Signed by: Kuhn, Amber	QA Review Quality Assurance Signed by: Arntz, Andy

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Mycoplasma Assay Report

PCR-based assay performed by WiCell
WiCell Stem Cell Bank, WiCell

15Aug25

Form SOP-83.01
Version 7.0

Sample Name	Result	Interpretation
CVCL_C7VY-WB68973 p39 (108755)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CVCL_C7VP-WB68993 p32 (108776)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CVCL_C7VQ-WB68992 p32 (108777)	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).

8/15/2025 X Steph Dos Santos Tech #1 Characterization Signed by: Dos Santos, Stephany	8/19/2025 X Amber Kuhn Tech #2 Characterization Signed by: Kuhn, Amber	8/20/2025 X Dawn Graham QA Review Quality Assurance Signed by: Graham, Dawn
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A gel image is available upon request.

Native Product Sterility Report



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

SAMPLE #: 25070686
DATE RECEIVED: 24-Jul-25
TEST INITIATED: 25-Jul-25
TEST COMPLETED: 08-Aug-25

SAMPLE NAME / DESCRIPTION: CVCL_C7VH-WB68975
CVCL_C7VM-WB68994
CVCL_C7VN-WB69011
CVCL_C7VP-WB68993
CVCL_C7VQ-WB68992
CVCL_C7VR-WB69005
CVCL_C7VT-WB68945
CVCL_C7VW-WB68972
CVCL_C7VX-WB68985
CVCL_C7VY-WB68973
CVCL_D3YC-WB69004
WIBR3-WB68995
WIBR3-WB69008
WIBR3-S1-WB68893
WIBR3-S2-WB68916
WIBR3-S3-WB68940
STAN224i-514C3-DB44527
STAN225i-514C4-DB44531
STAN261i-698C5-DB35565
STAN336i-963C1-DB44503
STAN337i-963C3-DB44506

UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
21	0	2 Negatives

TEST SUMMARY:

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

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

PD #:

000053

Native Product Sterility Report



TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: Sample #25070686

AUTHORIZED BY

A handwritten signature in blue ink that reads "Lee Vang".

DATE 11 Aug 25

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.