

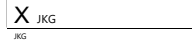


Thaw and Culture Details

Cell Line Name	H9-CAG-ChR2-EYFP
WiCell Lot Number	WB67468
Provider	University of Wisconsin – Dr. Su-Chun Zhang
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.
Culture Platform	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 Protocol
Passage Number	These cells were cultured for 29 passages post modification. Overall passage number is unknown. 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 29.
Date Vialied	09-May-2020
Vial Label	H9-CAG-ChR2-EYFP p29 WB67468
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-CH-003	Expected karyotype	See Report
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-CH-044	Negative	Pass

Approval Date	Quality Assurance Approval
18-June-2020	<div style="text-align: right;">6/18/2020</div>  X JKG <small>JKG Quality Assurance Signed by Goy, Jenna</small>

Date Reported: Wednesday, May 20, 2020

Cell Line: H9-CAG-ChR2-EYFP-WB67468

Passage#: 29

Date of Sample: 5/14/2020

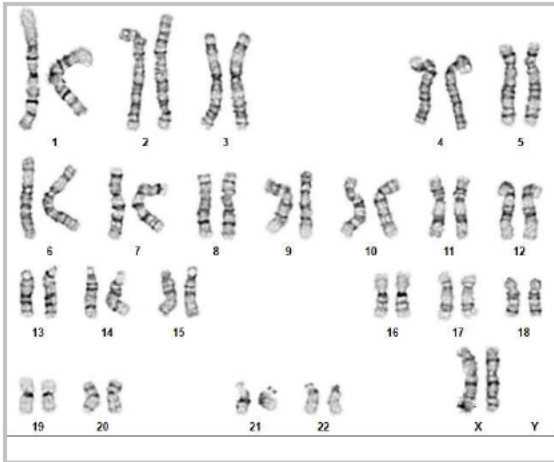
Specimen: Human Modified ESC

Results: 46,XX

Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 25

Slide: G01

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 475 - 500

Interpretation:

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

Completed by: [REDACTED]

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 Analysis

Receive Date: 05/26/20
 Report Sent: 06/03/20

Requestor: WiCell Characterization

Label on tube	H9-CAG-Chr2-EYFP-WB67468 p.29 (81277) D02	mCh-GnRH-WB67447 p.39 (81352) CP01	GFAP-R88C-WB67454 p.19 (81353) CP01
Label on Report	H9-CAG-Chr2-EYFP-WB67468 p.29 (81277) D02		
conc (ng/μL)	121.4		
A260/280	1.76		
Assay Date	5/29/2020		
File Name	STR 200601 wmr		
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	25		
Matches*			
Comments			

Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact [WiCell's Technical Support](#).



HISTOLOGY - IHC - MOLECULAR – IMAGING
 Department of Pathology and Laboratory Medicine
 TRIP Laboratory (Molecular)
<https://research.pathology.wisc.edu/trip-home/>
 (608) 265-9168



Your Lab Partner
 characterization@wicell.org
 (608) 316-4145

Short Tandem Repeat Analysis

Results: Based on the DNA and Cells submitted by WiCell Characterization Department for WiCell dated and received on 05/26/20, these samples define the STR profiles of the human cell lines as indicated by name. The genotypic profiles comprise a range of 25-27 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%.

*Acknowledge TRIP in your publications, posters & presentations. For details, see:
<https://research.pathology.wisc.edu/acknowledging-trip/>*

* **Note:** The STR profile of the following sample is an exact match for the given sample/samples.

X RMB

Digitally Signed on 06/03/20

██████████, BA
 TRIP Laboratory, Molecular

X WMR

Digitally Signed on 06/03/20

██████████, PhD, Director / Co-Director
 UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Testing was accomplished by analysis of human genetic polymorphisms at STR loci. This methodology has not yet been approved by the FDA and is for investigational use only.

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Native Product Sterility Report



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

SAMPLE #: 20051218
DATE RECEIVED: 21-May-20
TEST INITIATED: 28-May-20
TEST COMPLETED: 11-Jun-20

SAMPLE NAME / DESCRIPTION: WISCe011-A-40 WB67443
mCh-GnRH WB67447
GFAP-R88C WB67454
CREM024i-SS36-1 WB67440
H9-CAG-ChR2-EYFP WB67468
STAN094i-081C2 WB67446
MCW087i-U7112 WB67434
STAN360i-465C2 WB67451
CREM048i-BR3-1 WB67450
STAN251i-637C1 WB67455

UNIQUE IDENTIFIER: NA

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 15 JUN 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

13May20

FORM SOP-CH-048.01

Version C Edition 01

Sample Name	Result	Comments/Suggestions
H9-CAG-ChR2-EYFP-WB67468 (81224)	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], Cell Culture Specialist

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A gel image is available upon request.