



Thaw and Culture Details

Cell Line Name	H9-SOX2-GFP
WiCell Lot Number	DB47477
Provider	University of California – Dr. Karl Willert
Banked By	University of California – Dr. Karl Willert
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 10 wells of 6 well plates.
Culture Platform	Feeder Independent
	Medium: Essential 8™ Medium
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent E8 Medium Protocol
Passage Number	p90 These cells were cultured for 90 passages prior to freeze and post reprogramming. Add +1 to the passage number to best represent the overall passage number of the cells at thaw.
Date Vialied	24-August-2016
Vial Label	H9 sox2-GFP p90 8-24-16 ~10 ⁶ BL
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
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	Recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Consistent with STR profile of deposited cell line	Pass
Sterility	Biotest Laboratories	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-QU-004	Negative	Pass
Karyotype by G-banding	WiCell	SOP-CH-003	Report karyotype	Pass
Expression of Reporter Proteins	WiCell	SOP-CH-032	Expression of reporter proteins reported	Pass



Testing Reported by Provider

More information, where available, is provided on the cell line specific web page on the WiCell website.

- Expression of SOX2, OCT4, and NANOG by quantitative RT-PCR
- Differentiation into endoderm
- Immunofluorescence expressing SOX2, GFP, and NANOG by immunocytochemistry
- Expression of GFP by flow cytometry
- RNA sequencing

Test Description	Method	Result
Genetic Analysis	G-Band Karyotype	Normal Karyotype

Approval Date	Quality Assurance Approval
11-October-2016	<p style="text-align: right;">7/14/2020</p> <p>X AA AA Quality Assurance Signed by: Arntz, Andy</p>

Short Tandem Repeat Analysis

Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
<http://www.pathology.wisc.edu/research/trip>

WiCell®
info@wicell.org
(888) 204-1782

Sample Report:

12500-STR
Sample Name on Tube: 12500-STR
3.9 ng/μL, (A260/280=1.78)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:

WiCell Research Institute
Quality Department

Sample Date: N/A

Receive Date: 05/01/17
Assay Date: 05/03/17
File Name: STR 170504 wmr
Report Date: 05/05/17

STR Locus	STR Genotype Repeat #	STR Genotype
FGA	16-18,18.2,19,19.2,20,20.2,21,21.2,22, 22.2, 23, 23.2, 24, 24.2, 25, 25.2, 26-30, 31.2, 43.2, 44.2,45.2, 46.2	Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support .
TPOX	6-13	
D8S1179	7-18	
vWA	10-22	
Amelogenin	X,Y	
Penta_D	2.2, 3.2, 5, 7-17	
CSF1PO	6-15	
D16S539	5, 8-15	
D7S820	6-14	
D13S317	7-15	
D5S818	7-16	
Penta_E	5-24	
D18S51	8-10, 10.2, 11-13, 13.2, 14-27	
D21S11	24,24.2,25,25.2,26-28,28.2,29,29.2, 30, 30.2,31, 31.2,32,32.2,33,33.2, 34,34.2,35,35.2,36-38	
TH01	4-9,9.3,10-11,13.3	
D3S1358	12-20	

Results: Based on the 12500-STR cells submitted by WiCell QA dated and received on 05/01/17, this sample (Label on Tube: 12500-STR) exactly matches the STR profile of the human stem cell line WA09 comprising 24 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human WA09 stem cell line were detected and 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. This result suggests that the 12500-STR sample submitted corresponds to the WA09 stem cell line and was not contaminated with any other human stem 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 stem cell lines is ~2-5%.

X_{RMB}

Digitally Signed on 05/09/17

TRIP Laboratory, Molecular

X_{WMR}

Digitally Signed on 05/09/17

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

Native Product Sterility Report



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

SAMPLE #: 17050657
DATE RECEIVED: 04-May-17
TEST INITIATED: 08-May-17
TEST COMPLETED: 22-May-17

SAMPLE NAME / DESCRIPTION: H9-SOX2-GFP DB47477 12513
CREM001i-bBU1C2 DB47959 12514
CREM002i-BU2C10 DB47962 12515
CREM003i-BU3C2 DB47974 12516
CREM004i-SS2-1 DB47977 12517
CREM006i-SS4-1 DB47980 12518
CREM007i-SS5-1 DB47983 12519
CREM008i-SS6-1 DB47988 12520
CREM009i-SS8-2 DB47991 12521
CREM018i-SS24-1 DB48019 12522

UNIQUE IDENTIFIER: NA
PRODUCT REGISTRATION: Human iPS cells

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
METHOD VALIDATION / PD #: 000053
TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

Native Product Sterility Report



REVIEWED BY _____

[Handwritten signature in blue ink]

DATE _____

24 MAY 17

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.



Mycoplasma Detection Assay Report

Testing Performed by WiCell

Lot Release Testing

April 26, 2017

FORM SOP-QU-004.01

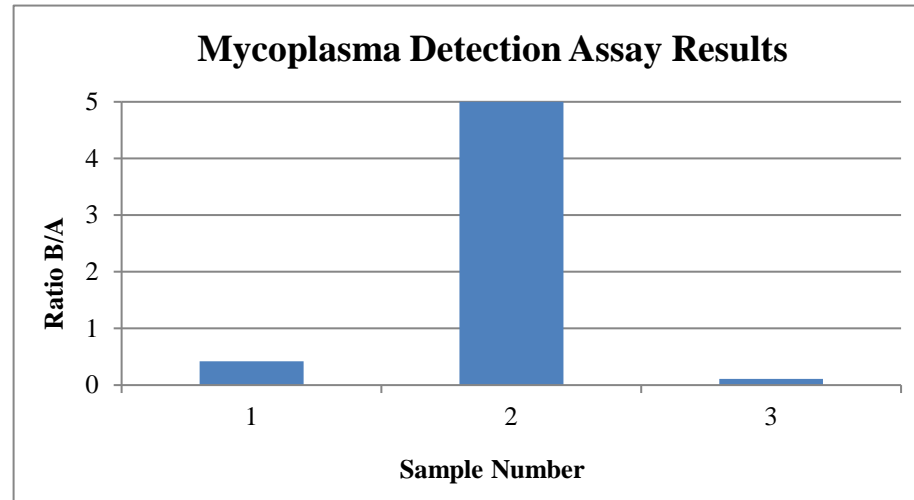
Version F Edition 02

Reported by: KR

Reviewed by: JB

BD Monolight 180

#	Sample Name	Reading A		A Ave	Reading B		B Ave	Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2		RLU1	RLU2				
1	H9-SOX2-GFP-DB47477 12500	276	288	282	122	116	119	0.42	Negative	
2	Positive (+) Control	455	438	446.5	23483	24011	23747	53.18	Positive	
3	Negative (-) Control	632	713	672.5	72	75	73.5	0.11	Negative	



Date Reported: Wednesday, May 10, 2017

Cell Line: H9-SOX2-GFP-DB47477 12503

Passage#: 91

Date of Sample: 5/1/2017

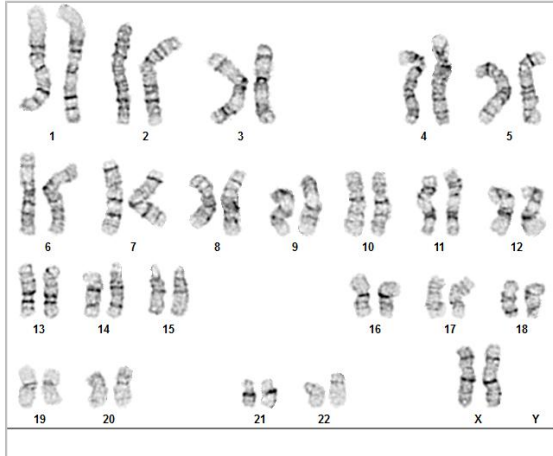
Specimen: hESC

Results: 46,XX

Cell Line Gender: Female

Reason for Testing: lot release testing

Investigator: [REDACTED], WiCell CDM



Cell: 40

Slide: 2

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 400 - 450

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

A signed copy of this report is available upon request.

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 may not be relied upon by any other party without the prior written consent of the Director of the WiCell Cytogenetics Laboratory. The results of this assay are for research use only. If the results of this assay are to be used for any other purpose, contact the Director of the WiCell Cytogenetics Laboratory.

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Cell Line-Lot Number	H9-SOX2-GFP-DB47477
Sample ID	12544
Passage Number	92
Reported By/Date	OG/05JUN17
QA Review By/Date	JKG 07Jun17
Percent Positive for Reporter Protein	71
Deviations from Procedure	<input checked="" type="checkbox"/> N/A
Notes	<input checked="" type="checkbox"/> N/A

Histogram Plot Indicating Positive Percentage of the Reporting Gene

Blue peak is negative control population. Red peak is test population.

