

Thaw and Culture Details

Cell Line Name	Al12e-HOPX-CIT+/-							
WiCell Lot Number	DB66697							
Provider	Allen Institute – Dr. Boaz Levi							
Banked By	Allen Institute – Dr. Boaz Levi							
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 4 well of a 6 well plate.							
Culture Platform	Feeder Independent							
	Medium: mTeSR™1							
	Matrix: Matrigel®							
Protocol WiCell Feeder Independent mTeSR™1 Protocol								
Passage Number	p65 These cells were cultured for 64 passages prior to freeze. Cells were modified at passage 45. The provider adds +1 to the passage number to best represent the overall passage number of the cells at thaw.							
Date Vialed	26-May-2016							
Vial Label	HOPX-C.CITRINE CN1098 CLONE#1 HET p65 May 26, 2016							
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

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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	OP-CH-305 Recoverable attachment after passage					
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	Steris	ST/07	Negative	Pass				
Mycoplasma	WiCell	SOP-QU-004	Negative	Pass				

Testing Reported by Provider

The provider has stated the following testing and results were performed for this cell line. Additional information about this cell line is provided on the cell line specific web page on the WiCell website.

Test Description	Result		
Karyotype by G-banding	Normal karyotype		
Mycoplasma	Negative		
Sterility	Negative		
Expression of reporter protein	Pass		



Approval Date	Quality Assurance Approval		
31-January-2018	SR/2020 HEB HEB Quality Assurance Signed by: Bruser, Haley		



Chromosome Analysis Report: 070737

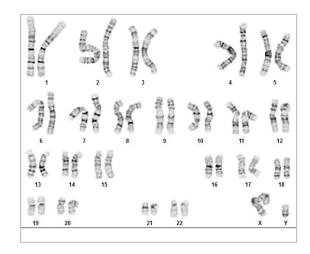
Date Reported: Wednesday, March 07, 2018 Cell Line Gender: Male

Cell Line: Al12e-HOPX-CIT+/--DB66697 13477 Reason for Testing: lot release testing

Passage#: 65

Date of Sample: 3/1/2018 Investigator:
Specimen: Human ES

Results: 46,XY



Cell: 23 Slide: G01

Slide Type: Karyotype

WiCell

QC Review By:

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 475 - 550

Interpretation:

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

Sent By:____

Completed by:	, CG(ASCP)
Reviewed and Interpreted by:	PhD, FACMG

A signed copy of this report is available upon request.

Director of the WiCell Cytogenetics Laboratory.

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 karvograms in this assay. Detection of heterogeneity of clonal

Sent To:_

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

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Short Tandem Repeat Analysis

HISTOLOGY - IHC - MOLECULAR - IMAGING

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:

13477-STR

Sample Name on Tube: 13477-STR

 $82.6 \text{ ng/}\mu\text{L}, (A260/280=1.93)$

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Quality Department Sample Date: N/A Receive Date: 03/05/18 Assav Date: 03/06/18

File Name: STR 180307 wmr

Report Date: 03/13/18

STR Locus	Locus STR Genotype Repeat #						
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					
TPOX	6-13	been redacted to					
D8S1179	7-18	protect donor					
vWA	vWA 10-22 nelogenin X,Y						
Amelogenin							
Penta_D							
CSF1PO							
D16S539	5, 8-15	WiCell's Technical Support.					
D7S820	6-14						
D13S317	7-15						
D5S818	D5S818 7-16						
Penta_E	Penta_E 5-24						
D18S51	D18S51 8-10, 10.2, 11-13, 13.2, 14-27						
D21S11	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						

<u>Results:</u> Based on the 13477-STR cells submitted by WiCell QA dated and received on 03/05/18, this sample (Label on Tube: 13477-STR) exactly matches the STR profile of the human stem cell line WA01 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human WA01 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 13477-STR sample submitted corresponds to the WA01 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity</u>: 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 03/14/18

Digitally Signed on 03/14/18

BA
TRIP Laboratory, Molecular

TRIP Laboratory, Molecular

UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report



SAMPLE #:

18021403

DATE RECEIVED:

22-Feb-18

TEST INITIATED:

23-Feb-18

TEST COMPLETED:

09-Mar-18

SAMPLE NAME / DESCRIPTION:

WiCell

504 S Rosa Rd, Rm 101

Madison, WI 53719

AI03e-DCXYFP DB66690 13456
AI06e-SOX2YFP DB66691 13457
AI07e-Timothy DB66692 13458
AI08e-PAX6YFP DB66693 13459
AI09e-KCTD13a DB66694 13460
AI10e-KCTD13b DB66695 13461
AI11e-OTX2YFP DB66696 13462
AI12e-HOPX-CIT+/- DB66697 13463
AI13e-HOPX-CIT+/+ DB66698 13464
CREM022i-SS32-1 WB66732 13466
iPS(IMR90)-1 WB66731 13467
STAN004i-147-1 DB31065 13468
STAN005i-147-2 DB31088 13469
STAN024i-29-1 DB30891 13470

WC034i-SOD1-D90A WB66734 13472 WC035i-SOD1-D90D WB66733 13473

STAN025i-29-2 DB30897 13471

WISC015i-SC7 WB66735 13474 WC008i-C603-4 WB66741 13475 WC034i-SOD1-D90A WB66740 13484

UNIQUE IDENTIFIER:

NA

PRODUCT REGISTRATION:

Other: Human iPS cells

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
20	0	3 Negatives

TEST SUMMARY:

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

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #:

000053

STERIS Laboratories, Inc. 9303 West Broadway Ave Brooklyn Park, MN 55445

LAB-003 rev 30 Form 5 Effective: 2017-08-29 Page 1 of 2

Native Product Sterility Report



USP - Direct Transfer

COMMENTS:

NA

18021403

REVIEWED BY Deward

DATE 22 MARIS

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

Testing Performed by WiCell Lot Release Testing March 1, 2018 FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: JB BD Monolight 180

		Reading A A		Read	ling B	В	Ratio			
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	AI12e-HOPX-CIT+/DB66697 13477	312	302	307	143	137	140	0.46	Negative	
2	Positive (+) Control	388	400	394	34112	34379	34246	86.92	Positive	
3	Negative (-) Control	706	732	719	101	92	96.5	0.13	Negative	

