




Thaw and Culture Details

| | |
|----------------------------------|--|
| Cell Line Name | H1-FMR1-FLAG |
| WiCell Lot Number | WB67514 |
| Provider | University of Wisconsin - Dr. Anita Bhattacharyya and Dr. Xinyu Zhao |
| 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 | p36 These cells were cultured for 35 passages prior to freeze. Cells were modified from WA01 at passage 28. 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 36. |
| Date Vialied | 16-July-2020 |
| Vial Label | H1-FMR1-FLAG p36 WB67514 |
| 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 |
|----------------|---|
| 27-August-2020 | <div style="text-align: right;">8/27/2020</div>  <small>X JKG JKG Quality Assurance Signed by Gay, Jenna</small> |

Date Reported: Friday, July 31, 2020

Cell Line: H1-FMR1-FLAG-WB67514

Submitted Passage #: 36

Date of Sample: 7/24/2020

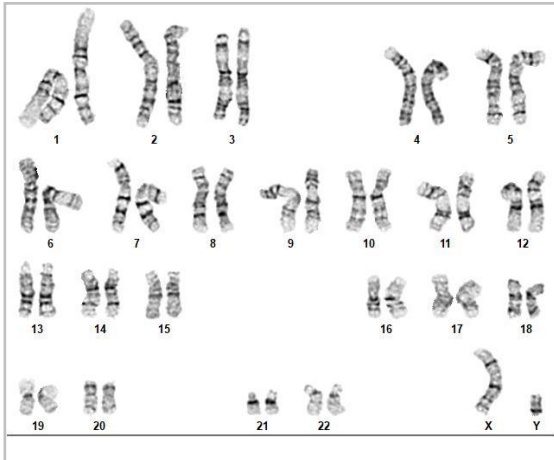
Specimen: Human Modified ESC

Results: 46,XY

Cell Line Sex: Male

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 33

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 9

Total Karyogrammed: 5

Band Resolution: 425 - 500

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

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: 08/05/20

Report Sent: 08/12/20

Requestor: WiCell Characterization

| Label on tube | 82127 | 82128 | 82129 | 82154 | 82181 | 82204 | 82205 |
|-----------------------|--|-----------------------------------|-------------------------------------|--|--|---------------------------------|-------------------------------------|
| Label on Report | JHU027i-DB40972 p.7 (82127) | H1-FMR1-FLAG-WB67514 p.36 (82128) | STAN130i-212C4-WB67515 p.16 (82129) | CREM005i-SS2-1GAG-DB66769 p.42 (82154) | STAN120i-192C2-WB67516 p.18 (82181) | H1-FMR1-KO-WB67517 p.40 (82204) | STAN099i-108C2-WB67518 p.15 (82205) |
| conc (ng/μL) | | 167.0 | | | | | |
| A260/280 | | 1.84 | | | | | |
| Assay Date | | 8/6/2020 | | | | | |
| File Name | | STR 200807 wmr | | | | | |
| FGA | Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support. | 20,24 | | | Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support. | | |
| TPOX | | 8,11 | | | | | |
| D8S1179 | | 12,13 | | | | | |
| vWA | | 15,17 | | | | | |
| Amelogenin | | X,Y | | | | | |
| Penta_D | | 10,13 | | | | | |
| CSF1PO | | 12,13 | | | | | |
| D16S539 | | 9,13 | | | | | |
| D7S820 | | 8,12 | | | | | |
| D13S317 | | 8,11 | | | | | |
| D5S818 | | 9,11 | | | | | |
| Penta_E | | 10,12 | | | | | |
| D18S51 | | 17,18 | | | | | |
| D21S11 | | 28,32.2 | | | | | |
| TH01 | 9.3,9.3 | | | | | | |
| D3S1358 | 15,15 | | | | | | |
| Allelic Polymorphisms | 27 | 28 | 28 | 27 | 25 | 28 | 26 |
| Matches* | | | 80512, 70862 | | 77321 | | 79403 |
| Comments | | | | | | | |

Short Tandem Repeat Analysis

| | |
|------------------------------|---|
| Label on tube | 82206 |
| Label on Report | STAN378i-886C4-WB67520 p.27 (82206) |
| conc (ng/μL) | Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support . |
| A260/280 | |
| Assay Date | |
| File Name | |
| FGA | |
| TPOX | |
| D8S1179 | |
| vWA | |
| Amelogenin | |
| Penta_D | |
| CSF1PO | |
| D16S539 | |
| D7S820 | |
| D13S317 | |
| D5S818 | |
| Penta_E | |
| D18S51 | |
| D21S11 | |
| TH01 | |
| D3S1358 | |
| Allelic Polymorphisms | 28 |
| Matches* | 77678 |
| Comments | |



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 submitted by WiCell Characterization Department dated and received on 08/05/20, these samples define the STR profiles of the human cell lines as indicated by name. The genotypic profiles comprise a range of 25-28 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 08/12/20

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

X *WMR*

Digitally Signed on 08/12/20

██████████, 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 #: 20071581
DATE RECEIVED: 30-Jul-20
TEST INITIATED: 31-Jul-20
TEST COMPLETED: 14-Aug-20

SAMPLE NAME / DESCRIPTION: MIN12i-33362.C WB67499
WISCe011-A-39 WB67500
STAN120i-192C2 WB67516
STAN130i-212C4 WB67515
STAN099i-108C2 WB67518
H1-FMR1-FLAG WB67514
H1-FMR1-KO WB67517
STAN378i-886C4 WB67520
STAN206i-459C1 WB67519
JHU027i DB40972

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 24 Aug 2020

Native Product Sterility Report



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

28Jul20

FORM SOP-CH-048.01

Version C Edition 01

| Sample Name | Result | Comments/Suggestions |
|--------------------------------|----------|---|
| H1-FMR1-FLAG-WB67514 (82049) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| STAN130i-212C4-WB67515 (82050) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| STAN120i-192C2-WB67516 (82084) | 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], Senior Cell Culture Specialist

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A gel image is available upon request.