Cell Line: WA07
Lot: 1

Table of Contents

STR Report 2
Mycoplasma Report 6
Karyotype Report 9

This material predates when WiCell produced a certificate of analysis for each lot. Therefore, a certificate of analysis is not available. The following pages are the reports for the testing completed for this lot.

If you have any questions please contact WiCell's technical support staff via our website side at www.wicell.org and we will be happy to assist you.

Thank you,

WiCell

P.O Box 7365 • Madison, WI 53707-7365 • Phone: 888.204.1782 • Fax: 608.441.8011
www.wicell.org

Wisconsin State Laboratory of Hygiene [redacted]

Laboratory Report

[redacted]

Cytogenetics
(608) 262-0402

Patient Name: H7p25 Lot1,
Patient Address:
,

SLH Lab #: 61100
Date of Birth:
Clinic or Hospital#:

[redacted]

[redacted]

Reason for Referral: DNA Fingerprinting

Report Date: 12/5/2003
Date Collected: 11/11/2003
Date Received: 11/11/2003

Specimen: CLID	Test(s) Performed: FISH	Amount:

CYTOGENETIC RESULTS:

No. of Cells Examined: No. of Colonies: No. of Karyotypes: Band Level:

Results: see page 2

Interpretation: Method
DNA was isolated from fixed cell pellet (57701 CLID) using the Promega-IQ DNA isolation kit. The isolated DNA was amplified by PCR using the Promega Powerplex16 amplification kit with primers for 15 STR(short tandem repeat) loci consisting of short repetitive sequence elements 3-7 base pairs in length. The post PCR product was analyzed on the ABI 3100 DNA sequencer and the data was used to make allele assignments for each locus.

Fingerprint matches as of 12/10/03: None available to date

Results called to [redacted] G

DNA FINGERPRINT

Lab Number 61100 CLID

Cell Line ID Identifier H7 p25 Lot 1

Species Human ES

RESULTS and INTERPRETATION

	Loci							
	D3S1358	THO1	D21S11	D18S51	PENTA E	D5S818	D13S317	D7S820
Alleles	15,16	6,6	30,31.2	12,15	11,13	11,13	11,12	10,11

	Loci							
	D16S539	CSF1PO	PENTA D	AMEL	Vwa	D8S1179	TPOX	FGA
Alleles	12,13	12,12	13,15	X,X	14,15	13,14	8,11	21,22

Gender assignment XX
Fingerprint matches as of 12/10/03: None availabble to date.

The population frequency for the genotype observed in this cell line ranges from 1 in 1.83 $x10^{17}$ for Caucasian-Americans to 1 in 1.41 $x\ 10^{18}$ for African Americans.

This test was validated in our laboratory using NIST DNA standards. These results are not for clinical use and are intended for research use on cell lines.

CompGene

ComprehensiveGeneticServices[sc]

[redacted]

DNA ANALYSIS REPORT

PATIENT ID#: 03-24605 **DOB:** **DATE OF REPORT:** 04/07/03

PATIENT NAME: **DATE RECEIVED:** 03/18/03

YOUR MEDICAL RECORD #: **YOUR LAB #:** H7 Lot 1

REFERRING PHYSICIAN: [redacted]

REFERRING CENTER: WI Cell Research Institute, Madison

REFERRED FOR: DNA Identity Profile

METHOD OF ANALYSIS: Molecular Fingerprinting

COMPARISON OF DNA SAMPLES BY MOLECULAR FINGERPRINTING

RESULT:

DNA isolated from the H7 Lot 1 cell pellet was evaluated at 13 STR and VNTR loci. The allele assignments are provided on the accompanying page for nine of the loci (18 alleles). These data alone provide a population frequency for the genotype observed in the cell line of < 1 in 10^{12}. A total of 26 alleles were evaluated and showed that H7 Lot 1 was unique.

Important counseling notes:

Unless otherwise indicated, at least ten unlinked, highly polymorphic VNTRs (variable number tandem repeats) and or STRs (short tandem repeats) are routinely evaluated to determine allele sharing in DNA samples. The loci evaluated are: HUMTH01, HUMCSF1PO, HUMPLA2A1, HUMF1301, HUMCYAR04, HUMLIPOL, D17S5, DXS101, vWF intron 40, TPOX, D1S158, D10S516, and D5S356. Familial relationships and paternity are assumed to be as stated. Inaccuracies in the disease diagnosis, stated familial relationships or non-paternity will jeopardise or invalidate the diagnostic interpretation.

*This test was developed and its performance characteristics determined by Comprehensive Genetic Services SC as required by the CLIA '08 Regulations. It has not been cleared or approved for specific uses by the FDA. The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes. It should not be regarded as investigational or for research.

[redacted]

cc: WI Cell Research Institute, Madison

[redacted]

Sample ID # 03-24605

Your ID # H7 Lot 1

	Allele 1	Allele 1 Freq.	Allele 2	Allele 2 Freq.
HUMCSF1PO ALLELE	315 bp	.334	315 bp	.334
HUMTH01 ALLELE	183 bp	.226	183 bp	.226
HUMPLA2A1 ALLELE 1	121 bp	.462	130 bp	.132
HUMF13A01 ALLELE	291 bp	.345	291 bp	.345
HUMLIPOL ALLELE	125 bp	.22	125 bp	.22
DXS101 ALLELE	200 bp	.03	215 bp	.22
vWF ALLELE	142 bp	.082	146 bp	.211
TPOX ALLELE	114 bp	.528	126 bp	.284
YNZ22 [D17S5] ALLELE	238 bp	.17	378 bp	.27

Mycoplasma Testing Services

Safe Cells®

BIONIQUE TESTING LABORATORIES, INC.
[redacted]

APPENDIX IV

Document#: DCF3013D
Edition#: 09
Effective Date: 11/03/2000
Title: **M-250 FINAL REPORT SHEET**

M-250 FINAL REPORT

Direct Specimen Culture
Procedure 3008, 3011, 3013

TO: [redacted]

BIONIQUE SAMPLE ID#: **33214** P.O.#: [redacted] DATE REC'D: **12/17/2002**

TEST/CONTROL ARTICLE:

H7p25 - 12-12-02

LOT#: **NA**

DIRECT CULTURE SET-UP (DAY 0) DATE: **12/19/2002**
INDICATOR CELL LINE (VERO) SEE DNA FLUOROCHROME RECORD SHEET

			DATE
THIOGLYCOLLATE BROTH	DAY 7	+ (−)	12/26/2002
	DAY 28	+ (−)	01/16/2003
BROTH-FORTIFIED COMMERCIAL 0.5 mL SAMPLE	DAY 7	+ (−)	12/26/2002
6.0 mL BROTH	DAY 28	+ (−)	01/16/2003
BROTH-MODIFIED HAYFLICK 0.5 mL SAMPLE	DAY 7	+ (−)	12/26/2002
6.0 mL BROTH	DAY 28	+ (−)	01/16/2003
BROTH-HEART INFUSION 0.5 mL SAMPLE	DAY 7	+ (−)	12/26/2002
6.0 mL BROTH	DAY 28	+ (−)	01/16/2003

(See Reverse)

Document#: DCF3013D
Edition#: 09
Effective Date: 11/03/2000
Title: M-250 FINAL REPORT SHEET

SAMPLE ID#: **33214**		AEROBIC	ANAEROBIC	DATE
AGAR PLATES-FORTIFIED COMMERCIAL	DAY 7	+ (-)	+ (-)	12/26/2002
	DAY 14	+ (-)	+ (-)	01/02/2003
	DAY 21	+ (-)	+ (-)	01/09/2003
AGAR PLATES-MODIFIED HAYFLICK	DAY 7	+ (-)	+ (-)	12/26/2002
	DAY 14	+ (-)	+ (-)	01/02/2003
	DAY 21	+ (-)	+ (-)	01/09/2003
AGAR PLATES-HEART INFUSION	DAY 7	+ (-)	+ (-)	12/26/2002
	DAY 14	+ (-)	+ (-)	01/02/2003
	DAY 21	+ (-)	+ (-)	01/09/2003
BROTH SUBCULTURES (DAY 7)		DATE: **12/26/2002**		
AGAR PLATES-FORTIFIED COMMERCIAL	DAY 7	+ (-)	+ (-)	01/02/2003
	DAY 14	+ (-)	+ (-)	01/09/2003
	DAY 21	+ (-)	+ (-)	01/16/2003
AGAR PLATES-MODIFIED HAYFLICK	DAY 7	+ (-)	+ (-)	01/02/2003
	DAY 14	+ (-)	+ (-)	01/09/2003
	DAY 21	+ (-)	+ (-)	01/16/2003
AGAR PLATES-HEART INFUSION	DAY 7	+ (-)	+ (-)	01/02/2003
	DAY 14	+ (-)	+ (-)	01/09/2003
	DAY 21	+ (-)	+ (-)	01/16/2003

RESULTS: No detectable mycoplasmal contamination

1/16/03
Date

[redacted]

M-250 Procedural Summary: The objective of this test is to ascertain whether or not detectable mycoplasmas are present in an in vitro cell culture sample, be it a primary culture, hybridoma, master seed stock or cell line. This procedure combines an indirect DNA staining approach to detect non-cultivable mycoplasmas with a direct culture methodology utilizing three different mycoplasmal media formulations. The indirect approach involves the inoculation of the sample into a mycoplasma-free VERO (ATCC) indicator cell line and performing a DNA fluorochrome assay after 72-120 hours of incubation. The direct culture aspect of the test utilizes three different mycoplasmal media including both broth and agar formulations. The sample is inoculated into each of the 3 broth formulations and also onto duplicate plates (0.1 mL/plate) for each of the 3 agar formulations. Subculture from broth to fresh agar plates is carried out after 7 days incubation. Agar plates are incubated aerobically and anaerobically in order to detect any colony forming units morphologically indicative of mycoplasmal contamination. Issuance of the final report with signature of the Scientific Director/Study Director signifies that the required controls were performed concurrently with the test sample(s) as detailed in the referenced SOPs and that all test conditions have been found to meet the required acceptance criteria for a valid test, including the appropriate results for the positive and negative controls.

Mycoplasma Testing Services

Safe Cells®

MYCOPLASMA TESTING SERVICES

BIONIQUE TESTING LABORATORIES, INC

[redacted]

APPENDIX I

Document #:	DCF3008A
Edition #:	05
Effective date:	7/16/2001
Title:	DNA FLUOROCHROME ASSAY RESULTS

DNA-FLUOROCHROME ASSAY RESULTS

Procedures 3008, 3009, 3011

Sample ID # **33214** **M-250** Date Rec'd: **12/17/2002** P.O. # [redacted]

Indicator Cells Inoculated: Date/Initials: 12/19/02 / JA

Fixation: Date/Initials: 12/23/02 / BMB

Staining: Date/Initials: 12/23/02 / BMB

TEST/CONTROL ARTICLE:

H7p25 - 12-12-02

LOT# **NA**

[redacted]

DNA FLUOROCHROME ASSAY RESULTS:

X **NEGATIVE:** A reaction with staining limited to the nuclear region, which indicates no mycoplasmal contamination.

_____ **POSITIVE:** A significant amount of extranuclear staining which strongly suggests mycoplasmal contamination.

_____ **INCONCLUSIVE:**

_____ A significant amount of extranuclear staining consistent with low - level mycoplasmal contamination or nuclear degeneration.

_____ A significant amount of extranuclear staining consistent with bacterial, fungal, viral or other microbial contaminant. Morphology not consistent for mycoplasmal contamination.

COMMENTS: _____

Results Read by: BMB Date: 12/23/02 Reviewed by: [illegible] Date: 12/23/02

Wisconsin State Laboratory of Hygiene [redacted]

Laboratory Report

Cytogenetics [redacted]

[redacted]

Patient Name: H7p25KV,
Patient Address:
,

SLH Lab #: 57701
Date of Birth:
Clinic or Hospital#:

Leanne Crandall
WICell Research Institute
PO Box 7365
Madison, WI 53707
and to:

[redacted]

Reason for Referral: Confirm, identify cell lines

Report Date: 1/10/03
Date Collected: 12/23/02
Date Received: 12/26/02

Specimen: CLID	Test(s) Performed: Culture, Karyotype	Amount:

CYTOGENETIC RESULTS:

No. of Cells Examined: 20 No. of Colonies: No. of Karyotypes: 2

Karyotype: 46,XX

Interpretation: The dividing stemcells (H7p24KV) demonstrated an apparently normal female karyotype, with no clonal changes.

[redacted]

Cytogenetics Laboratory

[redacted]

Case: 57701-CLID

Patient Name: H7p25KV

Karyotype:

46,XX