

NIGMS HUMAN GENETIC CELL REPOSITORY Induced Pluripotent Stem Cell (iPSC) Submission Form

SECTION 1: CONTACT INFORMATION

Principal Investigator (individual in whose laboratory this iPSC line was derived):

Submitting Institution (Institution where this iPSC line was derived):

Laboratory Contact Information:

Name: _____

Phone: _____

Email: _____

SECTION 2: INVENTORY INFORMATION

iPSC cell line name/identifier: _____

Passage number at freeze (should be greater than or equal to 10): _____

Label on tube: _____

Starting material cell type:

Fibroblast

Other (please describe): _____

SECTION 3: REPROGRAMMING INFORMATION

Reprogramming method:

Episomal mRNA Sendai virus mediated
 Lentiviral Retroviral Other (please specify): _____

Reprogramming vectors:

Yamanaka (please specify): _____

Thomson (please specify): _____

Addgene (please specify if available): _____

CytoTune® (please specify if available): _____

Reprogramming genes:

KLF4 LMYC cMYC shp53 OCT4 SOX2 NANOG LIN28A

Other: _____

Date of iPSC establishment: _____

Has the original cell line and/or iPSC line been described in a publication?

Yes (please list reference(s) with PubMed ID(s): _____

No

SECTION 4: CULTURING INFORMATION

Growth media (please list base media, serum and additives; if commercially available, please list commercial name and supplier):

Is this line grown on a feeder layer?

Yes (please list source of feeder cells): _____

No

Is this line grown on substrate-coated dishes?

Yes (please specify): _____

No

Other (please specify): _____

Concentration of FGF: _____

Do you use ROCK inhibitor in recovery media?

Yes (please specify concentration of ROCK inhibitor): _____

No

Passaging method (choose one):

Collagenase EDTA TrypLE Other (please specify): _____

Dispase EZ Tool Trypsin

Passage frequency (choose one):

5 days 7 days

6 days Other (please specify): _____

Split ratio (choose one):

1:3 1:5 Other (please specify): _____

1:4 1:6

Approximate % of spontaneous differentiation present in iPSC culture: _____

Do you use ROCK inhibitor in passage media?

Yes (please specify concentration of ROCK inhibitor): _____

No

Freeze media (please list base media, serum and additives; if commercially available, please list commercial name and supplier):

SECTION 5: CHARACTERIZATION OF UNDIFFERENTIATED iPSC LINE

Was immunostaining done?

- Yes
 No

Was RT-PCR done?

- Yes
 No

mRNA or protein expression detected for:

- | | | | |
|--------------------------------------|--|-----------------------------------|--|
| <input type="checkbox"/> GDF3 | <input type="checkbox"/> NANOG | <input type="checkbox"/> SSEA3 | <input type="checkbox"/> TRA-1-81 |
| <input type="checkbox"/> KLF4 | <input type="checkbox"/> POU5F1 (Oct4) | <input type="checkbox"/> SSEA4 | <input type="checkbox"/> Other (please specify): _____ |
| <input type="checkbox"/> LIN28A | <input type="checkbox"/> REX01 | <input type="checkbox"/> TERT | |
| <input type="checkbox"/> MYC (c-Myc) | <input type="checkbox"/> SOX2 | <input type="checkbox"/> TRA-1-60 | |

Was this iPSC line tested for genomic integration of reprogramming vectors?

- Yes
 No

What method was used to test for integrations?

Was genomic integration of reprogramming vectors detected in this iPSC line?

- Yes
 No

What was the copy number of any integrated reprogramming vector components?

SECTION 6: CHARACTERIZATION OF iPSC DIFFERENTIATION POTENTIAL

Has this iPSC line been assessed for pluripotency by:

- Pluritest. Performed at (name of facility): _____
- Scorecard™
- Teratoma formation. Performed at (name of facility): _____

Method(s) of *in vitro* differentiation (please indicate all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Adipocyte differentiation | <input type="checkbox"/> Hematopoietic differentiation |
| <input type="checkbox"/> BMP4-induced differentiation | <input type="checkbox"/> Neural differentiation (EZ Sphere method) |
| <input type="checkbox"/> Cardiomyocyte differentiation | <input type="checkbox"/> Neural differentiation (retinoic acid) |
| <input type="checkbox"/> Dopaminergic neurons (co-culture with PA6 cells) | <input type="checkbox"/> Pancreatic differentiation |
| <input type="checkbox"/> Embryoid body formation | <input type="checkbox"/> Other (please specify): _____ |
| <input type="checkbox"/> Endodermal differentiation | |

Differentiation of this iPSC line was assessed by:

- Immunostaining Both
- RT-PCR Other (please specify): _____

SECTION 7: ADDITIONAL CHARACTERIZATION

Was cytogenetic testing performed?

- Yes
 No

If yes:

1. At what passage? _____
2. Provide the karyotype (current ISCN nomenclature): _____
3. What test methodology was used (FISH, aCGH, etc.)? _____

Has this iPSC line been characterized for a specific mutation (e.g., point mutation, trinucleotide repeat)?

- Yes
 No

If yes, please describe the results (gene 1: allele 1; gene 1: allele 2; gene 2: allele 1; gene 2: allele 2) and reference sequence ID, if known: _____

Has this iPSC line been genotyped (e.g., DNA microarrays or array CGH)?

- Yes
 No

If yes, please indicate the platform(s) used and provide link to data, if available:

Has this iPSC line undergone other characterization(s) (e.g., transcriptome, epigenome, etc.)?

- Yes
 No

If yes, please indicate the platform(s) used and provide link to data, if available:

Has this iPSC line undergone DNA fingerprinting?

- Yes
 No

Was mycoplasma detected in this iPSC line?

- Yes Not tested
 No

Please provide any other relevant information regarding this cell line (e.g., does this cell line have any other transgene, fluorescent reporter or other modification? If yes, please provide details):

SECTION 8: PARENTAL CELL SOURCE

Parental cell source (name of biobank, clinical site, etc.): _____

If the parental cells (e.g., fibroblast, lymphoblast) ARE banked in Coriell Cell Repositories (Coriell), provide the Coriell ID (2 letters followed by 5 numbers): _____

If the parental cells were NOT obtained from Coriell, please complete APPENDIX 1 (page 7).

SECTION 9: RELEASE, PERMISSION, AND CONSENT

Has IRB-approved informed consent been obtained from the sample donor?

- Yes
 No

Is an unsigned copy of this consent form attached?

- Yes
 Not applicable; please describe: _____

Date this iPSC line will be available for submission to the NIGMS Repository: _____

Were parental cells collected using a consent form allowing general research use of the cells?

- Yes
 No

Is this iPSC line already banked at Coriell or elsewhere?

- Yes; please list organization: _____
 No

Number of requests received for this iPSC line: _____

Was the sample donor consented for biobanking with an external biobank?

- Yes
 No

Do you wish to request release of this iPSC line only to yourself or your designee during the first 12 months following submission?

- Yes
 No

To your knowledge, are there restrictions that would limit redistribution of this iPSC line?

- Yes
 No

Please explain any restrictions that would limit redistribution of this iPSC line:

Additional comments: _____

The cells and/or DNA derived from submitted samples may be distributed to scientists for many different types of research. The cells from submitted samples may also be used to create modified cell lines.

Scientists may use sample(s) submitted to the NIGMS Human Genetic Cell Repository (“NIGMS Repository”) to study the sample donor’s DNA and may share what they learn with other scientists. Data resulting from the use of submitted samples may be used in a research publication. In that event, the sample donor’s name or other personally identifying information will not be included, as this information is not available to the scientists. The sample donor will not be provided with any specific information or results generated from research using his/her specimen. However, there is a small possibility that the sample donor could learn that a sample described in research came from him/her and indirectly learn information about his/her sample.

If the sample donor informs me that he/she no longer wish to have his/her sample(s) in the NIGMS Repository, I may contact the NIGMS Repository by phone (856-757-4822) or by e-mail (NIGMS@coriell.org) and request that the donor’s remaining undistributed sample(s) and accompanying clinical information be withdrawn from the NIGMS Repository. However, it will not be possible to destroy samples and information that have already been distributed to researchers, and it will not be possible to remove any mention of my sample(s) in publications.

Unless a sample has been submitted directly to the NIGMS Repository by a sample donor, the NIGMS Repository does not store the sample donor’s name or any other personally identifying information. Therefore, any request for sample withdrawal must be made through me. As the investigator sending the donor’s sample to the NIGMS Repository, only I may have the link between the sample donor’s identity and his/her sample. I understand that a sample donor will be able to withdraw his/her sample ONLY if I have the link between the donor’s name and the Sample ID Number(s) submitted to the NIGMS Repository.

I agree NOT to share with anyone the link between the NIGMS Repository catalog identification number and personally identifying information from the donor of the sample being submitted to the NIGMS Repository.

I understand that no financial compensation or medical benefits will be extended to the individual from whom the sample was collected or to the sample submitter.

I hereby grant permission for cells from this sample to be stored in the NIGMS Repository and for progeny cells, derived DNA and other products (such as RNA) to be distributed to qualified investigators in academic or commercial laboratories. Scientists are strictly prohibited from distributing the cell lines directly derived from NIGMS Repository samples, or material directly isolated from them, in commercial products or services. However, scientists may use information learned from studies on the sample(s) to develop commercial products or services. (See the NIGMS Human Genetic Cell Repository Material Transfer Agreement (MTA) or visit <https://catalog.coriell.org/1/NIGMS/How-to-Order> for provisions regarding distribution of materials derived from your submission.)

I certify that none of the blood samples, biopsies or cell cultures submitted to the NIGMS Repository has been obtained from a live fetus, defined by the presence of a pulse, circulation, and other vital signs.

Submitting Investigator’s Name (please print): _____

Submitting Investigator’s Address: _____

Telephone #: _____

Fax #: _____

E-mail: _____

Submitting Investigator's Signature: _____ Date: ____/____/____

APPENDIX 1: DATA FOR PARENTAL CELLS/SAMPLE DONOR NOT AT CORIELL

If the parental cells were NOT obtained from Coriell, please:

- Complete section below
- Provide a sample of cells or DNA from the parental cell line for identity confirmation and chromosomal analysis.

Sample type submitted for identity confirmation:

- Cells
 DNA

Parental cell or DNA ID number: _____

Parental cells tissue type (e.g., skin, blood, etc.): _____

Parental cells tissue site (e.g., lung, arm, etc.): _____

Parental cell line type (e.g., lymphoblast, fibroblast, etc.): _____

Age of sample donor at time of sample collection: _____

- Days Years Unknown
 Weeks Fetal weeks
 Months Newborn

Is the sample donor still living?

- Yes Don't know
 No; age of death: _____

Phenotypic sex of sample donor:

- Male Ambiguous
 Female

Ethnicity of sample donor:

- Hispanic Unknown
 Non-Hispanic

Race of sample donor:

- American Indian/Alaskan Native White
 Asian Unknown
 Black/African American Other (please specify): _____
 Native Hawaiian/Other Pacific Islander

Ancestry of sample donor (e.g., Italian, Nigerian, Mexican, German-Japanese, etc.):

Phenotype of sample donor (description of donor phenotype relevant to diagnosis):

Source of clinical information (please attach copies of reports/summaries/records):

- | | |
|--|--|
| <input type="checkbox"/> Autopsy report | <input type="checkbox"/> Supplied with originating cell line |
| <input type="checkbox"/> Genetics Clinic report | <input type="checkbox"/> Publication |
| <input type="checkbox"/> Medical records | <input type="checkbox"/> Specialist report |
| <input type="checkbox"/> Physical exam | <input type="checkbox"/> Supplied with originating cell line |
| <input type="checkbox"/> Primary Care Physician report | <input type="checkbox"/> Other (please specify): _____ |

Clinical diagnosis of sample donor (e.g., name of disease, carrier, apparently healthy):

OMIM #: _____

Disease status of sample donor:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Affected | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Not affected | <input type="checkbox"/> Not applicable |

Age of sample donor at diagnosis: _____

- | | | |
|---------------------------------|--------------------------------------|----------------------------------|
| <input type="checkbox"/> Days | <input type="checkbox"/> Years | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Weeks | <input type="checkbox"/> Fetal weeks | |
| <input type="checkbox"/> Months | <input type="checkbox"/> Newborn | |

Age of sample donor at onset of symptoms: _____

- | | | |
|---------------------------------|--------------------------------------|----------------------------------|
| <input type="checkbox"/> Days | <input type="checkbox"/> Years | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Weeks | <input type="checkbox"/> Fetal weeks | |
| <input type="checkbox"/> Months | <input type="checkbox"/> Newborn | |

Sample donor diagnosed by:

- | | |
|--|--|
| <input type="checkbox"/> Geneticist | <input type="checkbox"/> Primary care physician |
| <input type="checkbox"/> Maternal fetal medicine/genetic counselor | <input type="checkbox"/> Specialist |
| <input type="checkbox"/> Pediatrician | <input type="checkbox"/> Other (please specify): _____ |

Is there a family history of this condition?

- | |
|------------------------------|
| <input type="checkbox"/> Yes |
| <input type="checkbox"/> No |

If yes, and no pedigree is available, please describe the relationship of the sample donor to other affected individuals. Please also briefly describe the phenotype(s) of the affected family member(s):

Have samples from other family members been submitted to the NIGMS Repository or any other Coriell repository?

- | |
|-------------------------------------|
| <input type="checkbox"/> Yes |
| <input type="checkbox"/> No |
| <input type="checkbox"/> Don't know |

If yes, please list the relationship to this sample. If known, please also list the Coriell Repository ID or the submitter's name and approximate date(s) of submission for each family member:

Has cytogenetic testing of a specimen from the sample donor been performed?

- Yes
 No

If yes: 1. Provide the karyotype (current ISCN nomenclature): _____
2. What test methodology was used (FISH, aCGH, etc.)? _____

Has molecular genetic testing of a specimen from the sample donor been performed?

- Yes
 No

Has the parental cell line been characterized for a specific mutation (e.g., point mutation, trinucleotide repeat)?

- Yes
 No

If yes: 1. Describe the results (gene 1: allele 1; gene 1: allele 2; gene 2: allele 1; gene 2: allele 2) and reference sequence ID, if known:

2. What test methodology was used?

- PCR Southern Blot
 Sequencing Other (please specify): _____

Biochemical testing:

- Yes
 No

If yes: 1. Enzyme(s)/activity level(s): _____
2. Abnormal metabolite(s): _____

Other testing (e.g., imaging, EKG, EEG, biopsy, pathology):

Test/result 1: _____
Test/result 2: _____
Test/result 3: _____

Please add or attach any other relevant information:

