



Metadata

<i>Describe the source of the cells/cell line including:</i>	Reference section	Page reported in manuscript
Name (or names)/alias of line	1.4; 5.1.2	
Unique ID/registry # (name of registry)	1.4	
Source (vendor and catalog number if obtained commercially); biopsy site and derivation details (if derived)	4.1.1; 5.1	
Additional metadata as applicable (e.g., sex, ethnicity, disease information, known mutations, etc.)	4.1.2; 5.4.1	

Culture details

<i>Describe methods used for isolation, maintenance, and preservation of the cells including:</i>	Reference section	Page reported in manuscript
Passaging/dissociation/split ratio	3.2; 4.2.2; 5.1.1	
Freezing and thawing	5.1.1	
Culture reagents used (e.g., media, matrices, growth factors, etc.) with vendor and catalog number	4.2.2; 5.1.1	
The passage number of the cryopreserved/characterized Master Cell Bank or Working Cell Bank stocks used, and the number of subsequent passages prior to and during experimentation	1.2; 3.2.2; 5.1.1	

Basic characterization

<i>Describe the assessment of the following including when they were performed relative to the experiments:</i>	Reference section	Page reported in manuscript
Authentication	1.3; Appendix 1	
Mycoplasma	1.6; Appendix 1	
Sterility (bacteriostasis/fungistasis)	1.6; Appendix 3	

Genomic characterization

<i>Describe the genomic characterization including:</i>	Reference section	Page reported in manuscript
Methodology used including sufficient detail to allow an assessment of sensitivity (e.g. the number of cells analyzed/resolution/depth of analysis)	3.1; 5.3; Appendix 5	
Timing of analysis in relation to key experiments reported	3.2	

Characterization of pluripotency and the undifferentiated state (PSCs only)

<i>Describe the following:</i>	Reference section	Page reported in manuscript
Assay methodology	2.1; 2.2; 5.2; Appendix 4	
Quantitative results along with statistical analysis	2.1; 2.2; 5.2; Appendix 4	
Timing of analysis in relation to key experiments reported	2.1; 2.2; 5.2	

Confirmation of cell type (TSCs only)

<i>Describe the characterization of the following:</i>	Reference section	Page reported in manuscript
Starting population(s) with recognized markers and methods	4.1; 4.3.1; 5.4.1	
Phenotype of expanded cells	4.1; 4.3.1; 5.4.1	
Demonstration of lineage potential	4.1; 4.3.1	

Molecular characterization

<i>Describe the following:</i>	Reference section	Page reported in manuscript
Confirmation of disease mutation (if applicable)	4.3.4	
Confirmation of genetic modification (if applicable)	4.4.3; 4.4.4	

Experimental details

<i>Describe the following:</i>	Reference section	Page reported in manuscript
Information regarding the experimental unit or sample type for each experiment (e.g. individuals, cell lines, clones, tissues, organoids, devices, batches, cells, etc.)	4.4.4; 5.4.2	
Number of replicates (biological/technical)	4.2.2; 5.4.2	

Data practices

<i>Information on:</i>	Reference section	Page reported in manuscript
Statistical methods used	4.4.1; 5.4.2	
Inclusion of the data and annotation code/software used for phenotype classification for computationally derived classifiers (if applicable)	5.4.4	
Verification that FAIR (https://www.go-fair.org/fair-principles) and CARE (https://www.gida-global.org/care) data management principles were followed	5.4.4	

Reporting practices for publishing results with human PSCs and tissue stem cells

ISSCR Task Force for Basic Research Standards¹

¹International Society for Stem Cell Research, Skokie, IL 60077, USA

This checklist is intended to help scientists, reviewers, and editors prepare and assess manuscripts for inclusion of critical details relevant to work with pluripotent stem cells (PSCs) and tissue stem cells (TSCs) with the goal of increasing the rigor and reproducibility of research through reporting. It is essential that any published paper includes detailed information on the following parameters to increase the transparency of the experimental details and ensure that the published results are reproducible. For additional details on the recommendations, please see the specific sections of the ISSCR's Standards for Human Stem Cell Use in Research referenced in the checklist (<https://www.isscr.org/standards-document>). All sections apply to PSCs and TSCs unless otherwise noted. To learn more about the Standards, visit <https://www.isscr.org/standards-document> or see Ludwig et al., this issue.

Consortia

The members of the ISSCR Task Force for Basic Research Standards are as follows: Tenneille E. Ludwig, Peter W. Andrews, Ivana Barbaric, Nissim Benvenisty, Anita Bhat-tacharyya, Jeremy M. Crook, Laurence M. Daheron, Jonathan S. Draper, Lyn E. Healy, Meritxell Huch, Maneesha S. Inamdar, Kim B. Jensen, Andreas Kurtz, Madeline A. Lancaster, Prisca Liberali, Matthias P. Lutolf, Jack T. Moshier, Christine L. Mummary, Martin F. Pera, Yoji Sato, Noriko Shimasaki, Austin G. Smith, Jihwan Song, Claudia Spits, Glyn Stacey, Christine A. Wells, and Tongbiao Zhao.

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DECLARATION OF INTERESTS

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