

How do I find the cell line I want?

The EBiSC website (cells.ebisc.org) allows you to enter search terms such as a disease of interest. If cell lines exist that fit your search criteria, they will be shortlisted so that you can find out more details to help you make your choice.

What Quality Control data is performed on the cell lines?

All cell line batches can only be released when a set of release criteria assays has been performed and passed. These include:

- Sterility
- Mycoplasma
- Viral pathogens (HIV-1, HIV2, HBV and HCV)
- Cell line identity
- Viability
- Morphology

Additional characterisation data will also be displayed on the EBiSC catalogue (cells.ebisc.org).

What characterisation data come with the cell lines?

Each cell line is shipped together with a Certificate of Analysis. This details cell line characterisation and release Quality Control testing performed, in addition to the passage number, culture conditions and any cell line specific information about morphology and growth patterns.

How should I culture the cells?

EBiSC has simplified the feeder-free culture conditions of the iPSC lines it provides to include one of two different sets of media and matrix combinations. Instructions can be found in the EBiSC Protocol for Culture of induced Pluripotent Stem Cells, available on the website. The conditions recommended for your chosen cell line vial(s) are detailed in the Certificate of Analysis.

How should I thaw the cells?

Cells are typically thawed into 1-2 well(s) of a 6 well plate coated with the appropriate matrix, but ensure that you check the Certificate of Analysis for cell line specific guidance. General thawing and culture instructions can be found in the EBiSC Protocol for Culture of induced Pluripotent Stem Cells, available on the website.

How are cell lines cryopreserved?

All lines are cryopreserved in DMSO based cryoprotectant. Please refer to your Certificate of Analysis for cell line batch specific details.

How many cells are contained in each vial?

EBiSC iPS cell lines are typically cryopreserved with between 1 and 2 million cells per vial.

What does a vial of cells cost?

The basic tariff price for EBiSC iPS cell lines is £700 per vial. This facilitates the not-for-profit operations of the Bank, including maintenance of facilities and the expansion of newly reprogrammed and/or gene edited lines.

How do I purchase a cell line?

When you have selected one or more lines listed in the EBiSC catalogue (cells.ebisc.org), and reviewed the specific Cell Line Information Pack that accompanies each, you will be directed to the ECACC website for purchase. If you are new to EBiSC, you will be asked to register as a User. Upon placing your order, your organisation will be sent an EBiSC Access & Use Agreement, which must be completed and submitted to the Bank with appropriate payment prior to shipment of the cells.

How will the cell lines be shipped?

The standard shipment method for small numbers of vials within Europe will be on dry ice.

How does EBiSC cell line naming work?

A systematic cell line naming method is used to standardise naming and identify the depositor of the cell lines. The name indicates:

- where a cell line was originally derived (first 3-5 capital letters);
- that it is an iPS cell line;
- the donor number from the particular centre (001-999).
- the clone ID from the specific donor (A-Z).

For example, the first line from the first donor from the Universitätsklinik Bonn is UKBi001-A.

The final number which is sometimes appended to this code indicates a sub-clone: for example, generation of a sub-clone via gene editing of a parental iPS cell line. The first gene edited isogenic control of this line denoted as UKBi001-A-1.

When I obtain an EBiSC cell line, do I become the owner of the material?

No. The Depositor remains the owner of the cell line. You as a User are granted a right to use the banked material for research purposes.

If my research involves manipulation of the cell line by, for example, gene editing, will I become the legal owner of the resulting material?

Possibly. Where the changes to the cell line result in a substance that is significantly different from the original banked material it is considered a 'derivative', which you would own. Such substance might be i. derived from, ii. a modification of, iii. a product of the use of, or iv. wholly or partially incorporate, the original cell line.

Can I, as a for-profit organisation, obtain EBiSC lines for use in research that is aimed at the development of products capable of sale on the commercial market?

Yes. EBiSC encourages commercial organisations to utilise EBiSC cell lines in the conduct of research, both basic and developmental. The 'research use' permitted by the EBiSC Access & Use Agreement includes research involving development of products as well as steps involved in making them fit for commercial market, including procedures for protection of intellectual property (eg filing for patents) related to novel IP generated during the course of the work. One exception to 'research use' is that a User may not conduct research activities under contract to third parties external to its organisation. To use EBiSC cell lines to provide 'fee for service' research activities (drug screening, for example) a User would be required to obtain the approval of, or enter into separate legal arrangements with, the Depositor of the cell line.

Are there are restrictions on use of EBiSC cell lines?

It is a main EBiSC objective to increase the accessibility of quality iPS cell lines by researchers, thus promoting their use in disease modelling and other forms of biomedical research. The use of EBiSC cell lines is however bounded by certain parameters that users should be aware of:

i. Research use only. At present, all cell lines in the EBiSC catalogue are 'research grade', not 'clinical grade', and are thus for research use only. Uses of EBiSC lines in clinical procedures, or for the purpose of human reproductive cloning, are prohibited.

ii. No 'fee for service' research activities. The 'research use' definition adopted by EBiSC permits public and private sector research, but doesn't include research activities if they are carried out under commercial contract to third parties. Fee for service activities might include, for example, iPS cell differentiation into a specific cell or tissue type to enable a researcher to run drug screening assays. Users wishing to conduct fee for service contract work or otherwise carry out direct exploitation of EBiSC cells should contact the Depositor of the cell line to negotiate a commercial agreement.

iii. Local law and regulations. Depending on the legal jurisdiction in which research is conducted, local laws and regulations may impose on research different and potentially more restrictive norms of conduct than are anticipated by EBiSC policies. Users should inform themselves therefore, before ordering EBiSC cell lines, about any applicable rules or informal guidance that might define or limit the use of such cell lines in the intended place of use.

iv. Obligations of the Depositor to third parties. EBiSC discourages Depositors from imposing their own criteria for use of cell lines that they deposit voluntarily with the Bank, but is realistic about the fact that Depositors may be legally bound to third parties, such as patent or other rights holders, to pass on certain obligations to the User. EBiSC passes on to the User information about these obligations provided by the Depositor (such as a requirement to contact the rights holder, or enter into a new licence to use the cell lines) before an EBiSC AUA is entered into.

v. Respect for donor-imposed restrictions. Third party obligations would include any constraints on the use of cell lines defined by the donor of original tissue from which the iPSC cells originate. As far as possible, EBiSC cell lines will be supported by the consent of the primary tissue donor to all types of iPSC research anticipated for EBiSC Users. In some cases, however, cell lines will be of sufficient research interest to be placed in the catalogue despite limitations imposed by the donor such as a specification of academic use, or research in a specific disease category. In these instances, the User will be made aware of the donor's wishes, and take sole responsibility for respecting them.

What is hPSCreg?

www.hPSCreg.eu is the human Pluripotent Stem Cell Registry, a web-based publically available information database for pluripotent stem cells (embryonic and induced pluripotent stem cells), hosted and maintained by the Charité Medical University, Berlin. All EBiSC cell lines will be registered on hPSCreg.