



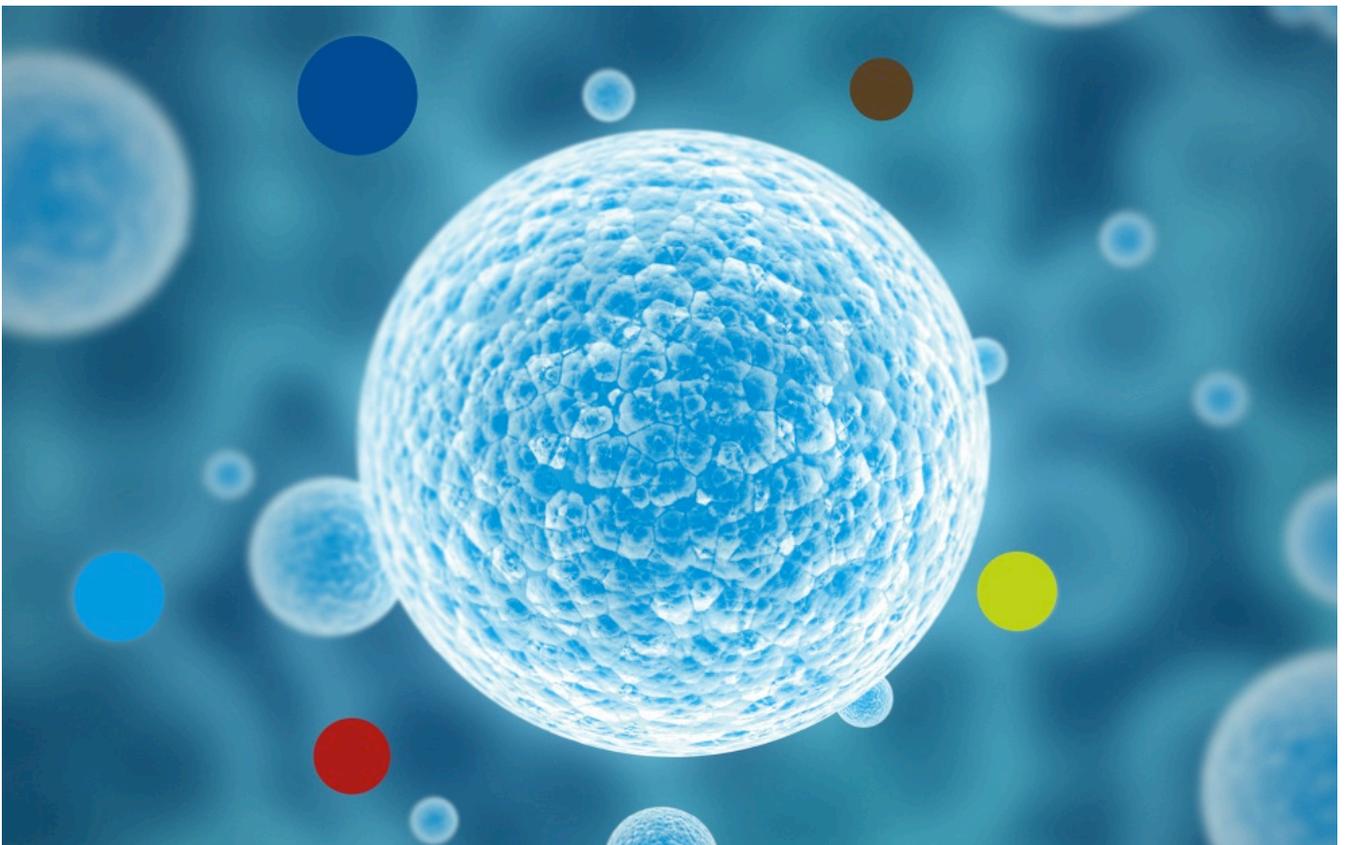
innovative
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EBiSC Catalogue User Guide

European Bank for induced pluripotent Stem Cells



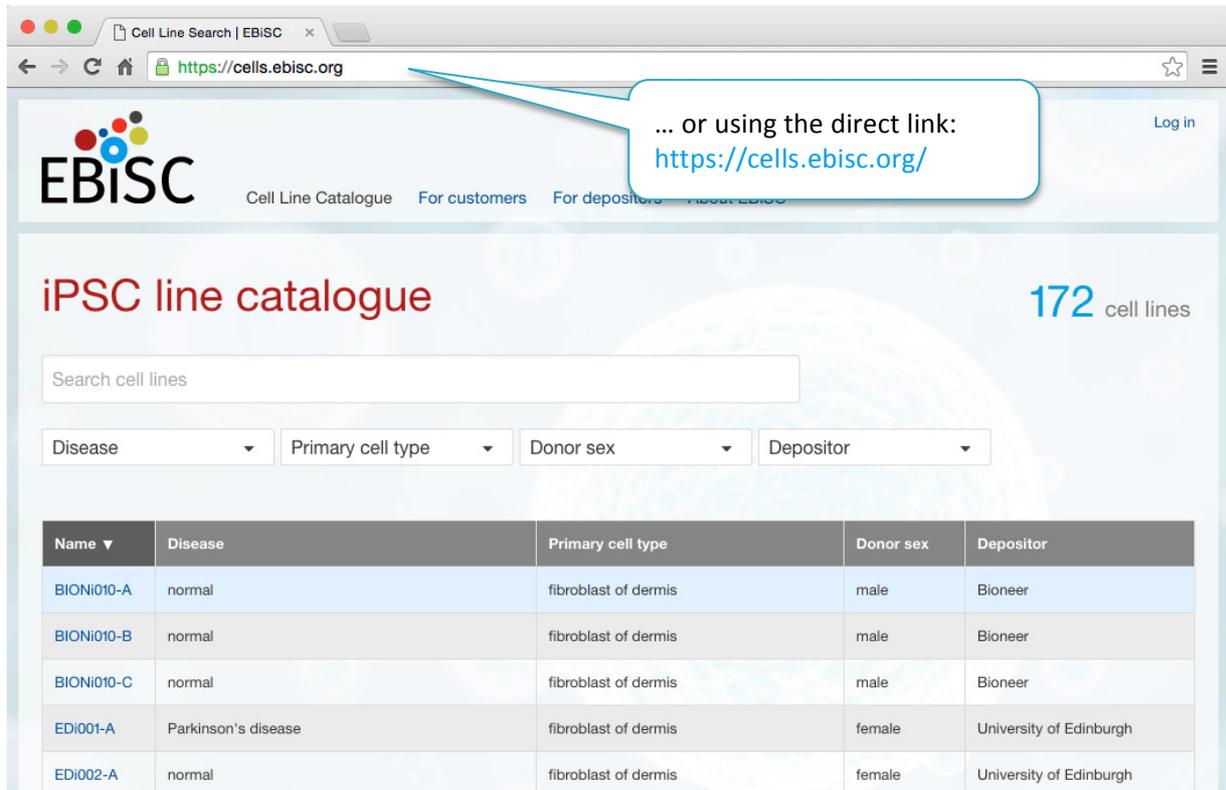
<https://cells.ebisc.org> & <http://ebisc.org/>

The EBiSC - European Bank for induced pluripotent Stem Cells project has received support from the Innovative Medicines Initiative Joint Undertaking under grant agreement n° 115582, resources of which are composed of a financial contribution from the European Union's Seventh Framework Programme (FP7/2007-2013) and EFPIA companies' in kind contribution. www.imi.europa.eu

The EBiSC Cell line catalogue lists all EBiSC cell lines available for purchase. The lines are displayed in a table that presents a general overview of the collection and supports sorting by different parameters such as name, depositor, disease and cell type).

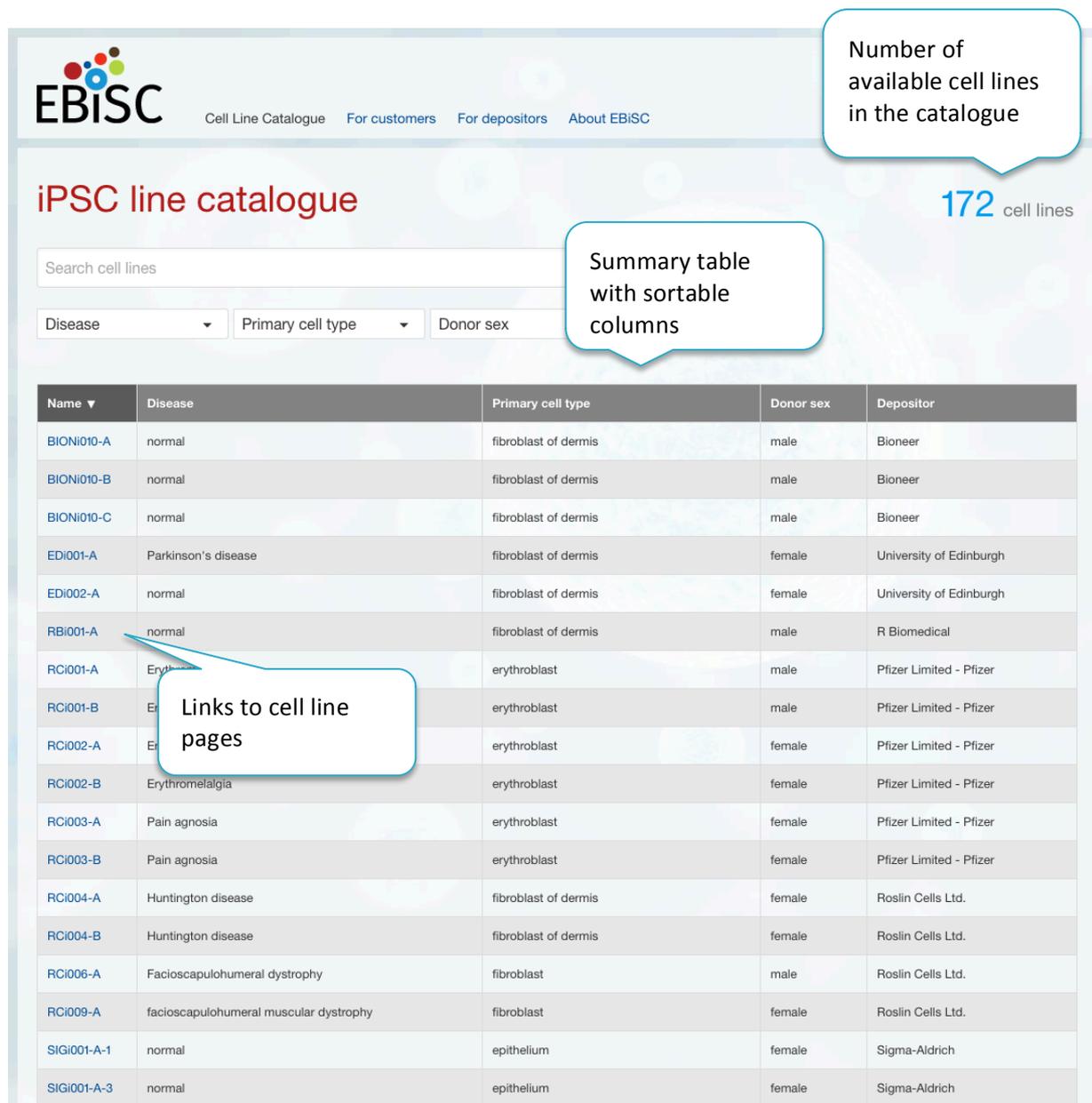
Accessing the Catalogue

You can access the catalogue via the main EBiSC website (<http://ebisc.org/>) or directly (<https://cells.ebisc.org/>).



About the Catalogue

The front page displays the current status of the catalogue and includes all lines that are available for purchase. They are displayed in a searchable table that provides cell line summary information: the disease state, primary cell type, donor sex and depositing organisation. The name column links to a separate individual page for each cell line.



The screenshot shows the EBiSC website interface. At the top left is the EBiSC logo and navigation links: "Cell Line Catalogue", "For customers", "For depositors", and "About EBiSC". The main heading is "iPSC line catalogue" with a sub-heading "172 cell lines". A search bar is labeled "Search cell lines". Below the search bar are three dropdown menus: "Disease", "Primary cell type", and "Donor sex". A callout bubble points to the search bar with the text "Number of available cell lines in the catalogue". Another callout bubble points to the dropdown menus with the text "Summary table with sortable columns". A third callout bubble points to the "Name" column of the table with the text "Links to cell line pages".

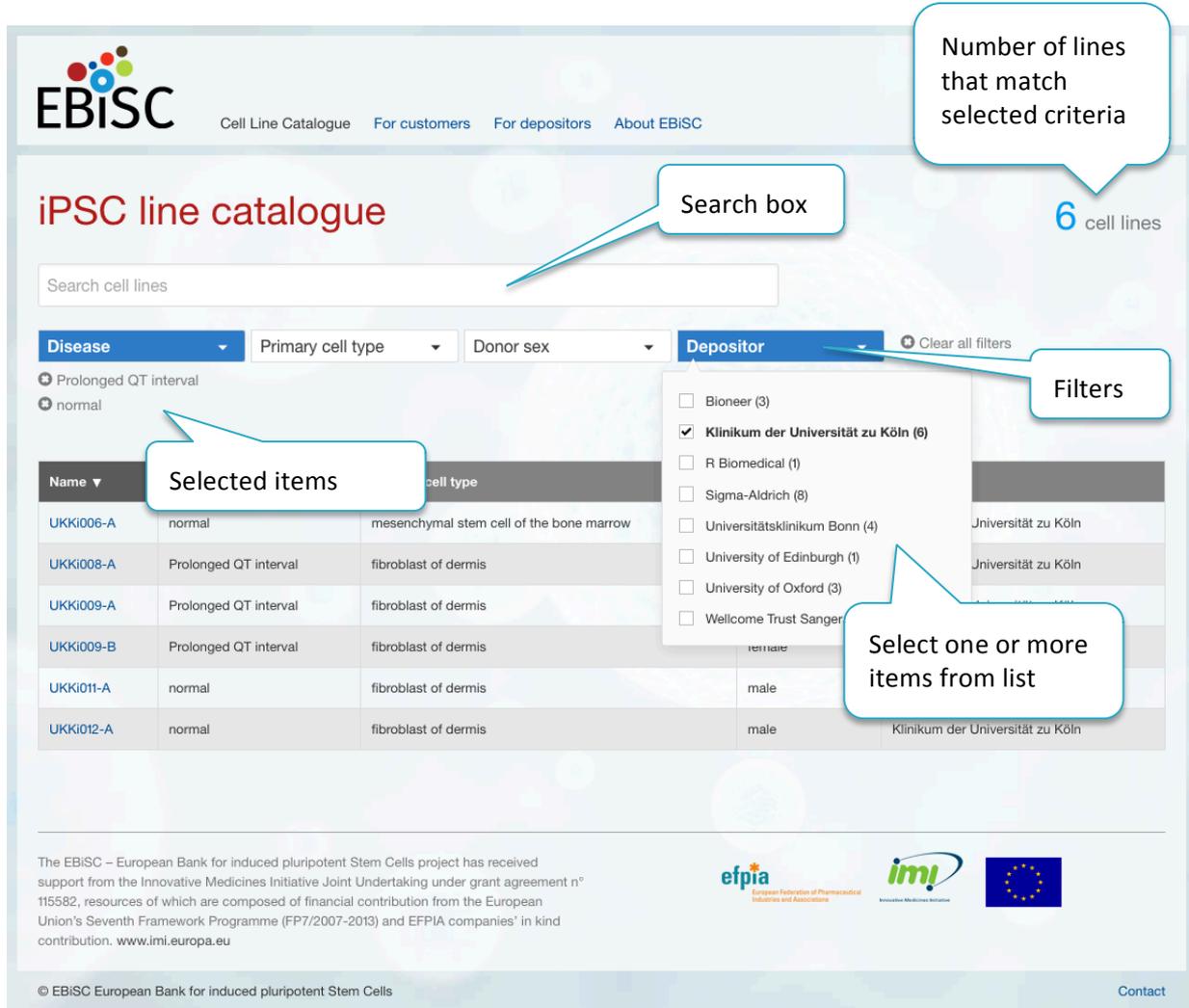
Name ▼	Disease	Primary cell type	Donor sex	Depositor
BIONI010-A	normal	fibroblast of dermis	male	Bioneer
BIONI010-B	normal	fibroblast of dermis	male	Bioneer
BIONI010-C	normal	fibroblast of dermis	male	Bioneer
EDI001-A	Parkinson's disease	fibroblast of dermis	female	University of Edinburgh
EDI002-A	normal	fibroblast of dermis	female	University of Edinburgh
RBI001-A	normal	fibroblast of dermis	male	R Biomedical
RCI001-A	Erythroblastosis	erythroblast	male	Pfizer Limited - Pfizer
RCI001-B	Erythroblastosis	erythroblast	male	Pfizer Limited - Pfizer
RCI002-A	Erythroblastosis	erythroblast	female	Pfizer Limited - Pfizer
RCI002-B	Erythromelalgia	erythroblast	female	Pfizer Limited - Pfizer
RCI003-A	Pain agnosia	erythroblast	female	Pfizer Limited - Pfizer
RCI003-B	Pain agnosia	erythroblast	female	Pfizer Limited - Pfizer
RCI004-A	Huntington disease	fibroblast of dermis	female	Roslin Cells Ltd.
RCI004-B	Huntington disease	fibroblast of dermis	female	Roslin Cells Ltd.
RCI006-A	Facioscapulohumeral dystrophy	fibroblast	male	Roslin Cells Ltd.
RCI009-A	facioscapulohumeral muscular dystrophy	fibroblast	female	Roslin Cells Ltd.
SIGI001-A-1	normal	epithelium	female	Sigma-Aldrich
SIGI001-A-3	normal	epithelium	female	Sigma-Aldrich

Search and filtering

You can use keyword search and faceted filtering to narrow the number of displayed cell lines from the catalogue.

Filter Search

You can use multiple filters and values within filters when looking for suitable cell lines.



The screenshot shows the EBiSC iPSC line catalogue interface. Key features are highlighted with callouts:

- Search box:** A text input field labeled "Search cell lines".
- Filters:** A set of dropdown menus for "Disease", "Primary cell type", "Donor sex", and "Depositor". A "Clear all filters" button is also present.
- Selected items:** A callout pointing to the "Depositor" dropdown menu, which is open and shows a list of institutions with checkboxes and counts. "Klinikum der Universität zu Köln" is selected with a checkmark and a count of 6.
- Number of lines that match selected criteria:** A callout pointing to the "6 cell lines" indicator in the top right corner.
- Select one or more items from list:** A callout pointing to the "Klinikum der Universität zu Köln" item in the dropdown menu.

The table below shows the data displayed in the catalogue:

Name	Disease	Primary cell type	Donor sex	Depositor
UKKI006-A	normal	mesenchymal stem cell of the bone marrow		Universität zu Köln
UKKI008-A	Prolonged QT interval	fibroblast of dermis		Universität zu Köln
UKKI009-A	Prolonged QT interval	fibroblast of dermis		Universität zu Köln
UKKI009-B	Prolonged QT interval	fibroblast of dermis	female	Universität zu Köln
UKKI011-A	normal	fibroblast of dermis	male	Universität zu Köln
UKKI012-A	normal	fibroblast of dermis	male	Klinikum der Universität zu Köln

Footer text: The EBiSC – European Bank for induced pluripotent Stem Cells project has received support from the Innovative Medicines Initiative Joint Undertaking under grant agreement n° 115582, resources of which are composed of financial contribution from the European Union's Seventh Framework Programme (FP7/2007-2013) and EFPIA companies' in kind contribution. www.imi.europa.eu

Logos for efpia, imi, and the European Union are also visible.

Currently available filters are: Disease, Primary Cell type, Donor sex and Depositing organisation. The numbers next to items inside filters display how many lines in the catalogue match the selection criteria. Each time you select values for a filter they appear below the filter box. The selection items in all other filters are refreshed according to your current selection and availability in the catalogue.

You can remove selected filter items by clicking on the x icon in front of each item. Or you can click on "Clear all filters" to remove all selected items.

Keyword search

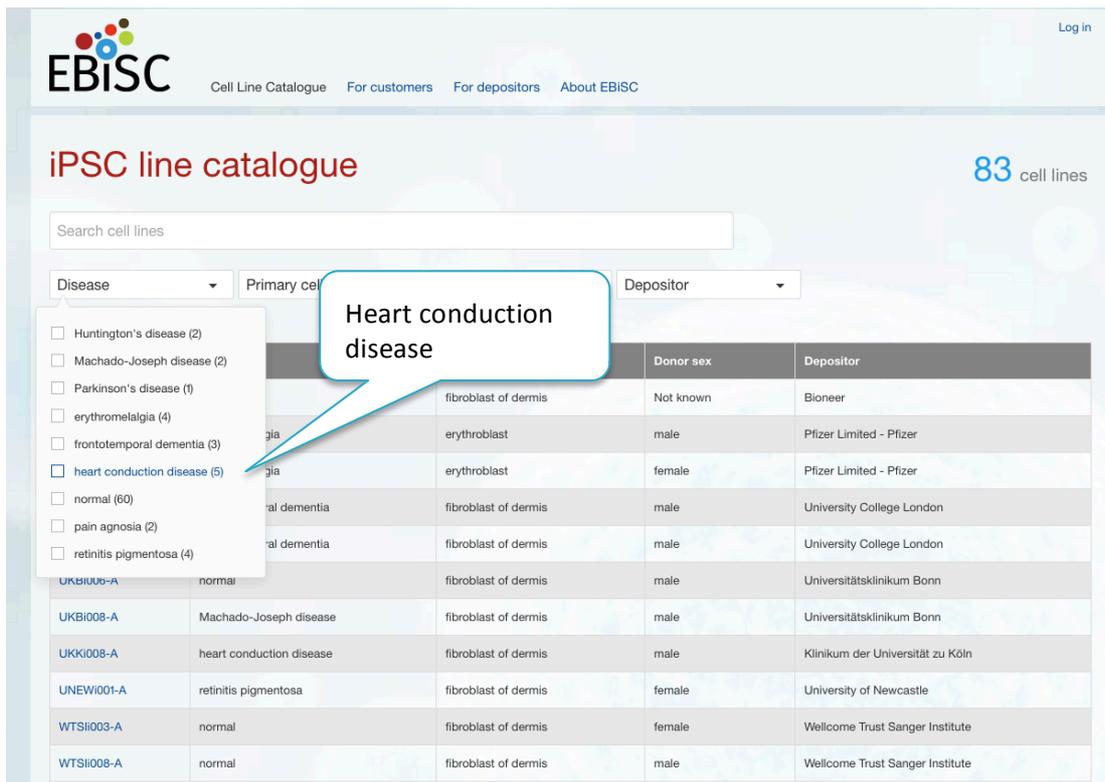
The search box above the filters enables broader searching. You can find lines based on other descriptive information associated with them, beyond what is displayed in the summary table.

The number of found / available cell lines that match your selected criteria always appears in the upper right hand side of the page.

Example search

Anne is looking for lines associated with heart conduction disease and lines with mutations in RYR2.

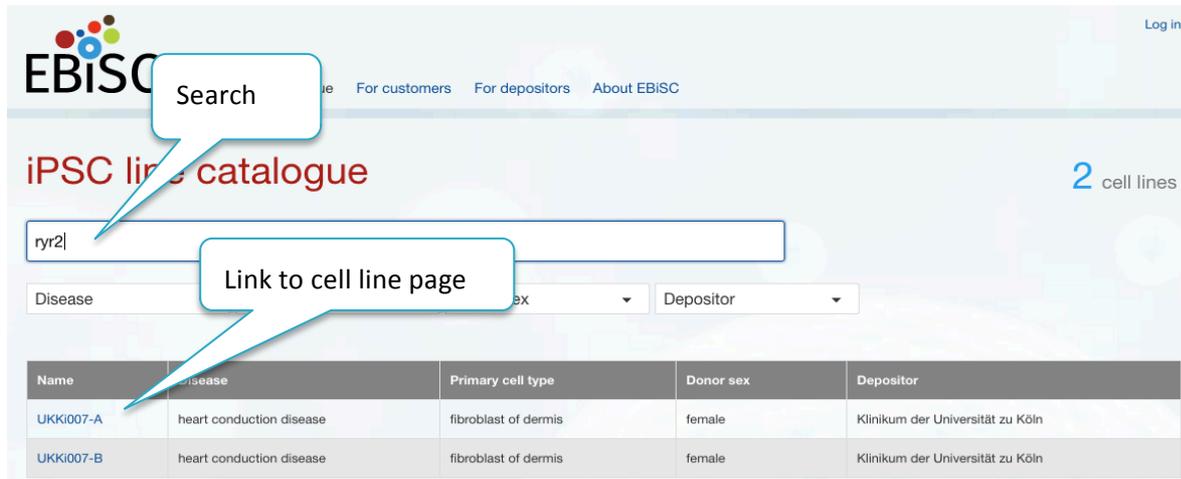
First, Anne looks at the disease dropdown filter. She sees heart conduction disease and that there are five lines associated with that disease available in the EBiSC catalogue. Anne clicks on the heart conduction check box and this filters the results in the summary table to five lines that are associated with this disease.



The screenshot shows the EBiSC iPSC line catalogue interface. At the top, there is a search box and navigation links. The main content area displays a list of cell lines with filters for Disease, Primary cell type, and Depositor. A dropdown menu for the Disease filter is open, showing a list of diseases with their respective counts. The 'heart conduction disease (5)' option is selected, and a callout box points to it with the text 'Heart conduction disease'. Below the filter, a table lists the cell lines associated with heart conduction disease.

Cell Line ID	Disease	Primary cell type	Donor sex	Depositor
UKBI008-A	normal	fibroblast of dermis	male	Universitätsklinikum Bonn
UKBJ008-A	Machado-Joseph disease	fibroblast of dermis	male	Universitätsklinikum Bonn
UKKI008-A	heart conduction disease	fibroblast of dermis	male	Klinikum der Universität zu Köln
UNEW001-A	retinitis pigmentosa	fibroblast of dermis	female	University of Newcastle
WTSI003-A	normal	fibroblast of dermis	female	Wellcome Trust Sanger Institute
WTSI008-A	normal	fibroblast of dermis	male	Wellcome Trust Sanger Institute

Anne is particularly interested in mutations in the RYR2 gene. The information is not visible in the summary table, so Anne decides to use the search box and types RYR2. The table is further filtered to lines that have this gene name in their description.



Search

ryr2

Link to cell line page

Name	Disease	Primary cell type	Donor sex	Depositor
UKKi007-A	heart conduction disease	fibroblast of dermis	female	Klinikum der Universität zu Köln
UKKi007-B	heart conduction disease	fibroblast of dermis	female	Klinikum der Universität zu Köln

There are two lines with the RYR2 gene in their description. These are actually two different cell lines from the same donor. This can be seen from the cell line name, both lines have the stem UKKi007 following by a different letter, A and B.

After finding lines of interest, Anne can now view detailed information on each cell line by clicking on their names.

Cell line page

Each cell line page displays:

- General information about a cell line, including donor and disease information, depositor and reference publications
- Link to the ECACC catalogue where you can purchase the cell line
- Link to the Cell line information pack
- Images of the cell line if available



[Cell Line Catalogue](#)
[For customers](#)
[For depositors](#)
[About EBiSC](#)

[Log in](#)

UKKi009-B

Disease status

Diagnosed disease: Prolonged QT interval
 Disease associated phenotypes: prolonged QT interval on ECG
 Family history: Not known
 Medical history: Yes
 Clinical information: Yes
 Affected status: affected

Donor information

Gender: female
 Age: 35-39
 Country of origin: Germany
 Ethnicity: Caucasian, German
 Donor phenotypes: Prolonged QT interval, syncopes
 Donor karyotype: 46,XX

General information

Depositor: Klinikum der Universität zu Köln
 Cell line name: UKKi009-B
 Cell line alternative names: NP0011-19
 Biosamples ID: [SAMEA2825897](#)

Link to ECACC online store, where you can purchase the cell line

Cell line availability

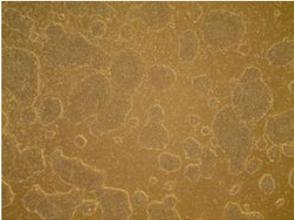
Disease information

Donor information

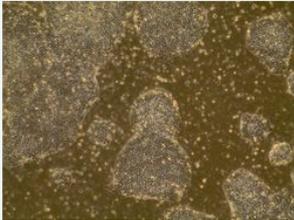
Depositor

Cell Line Information Pack

Cell Line Information Pack



Timepoint: Confluence
Magnification: 4x



Timepoint: Confluence
Magnification: 10x

Example images of the cell line if available

Purchase cell line

At European Collection of Authenticated Cell Cultures (ECACC)

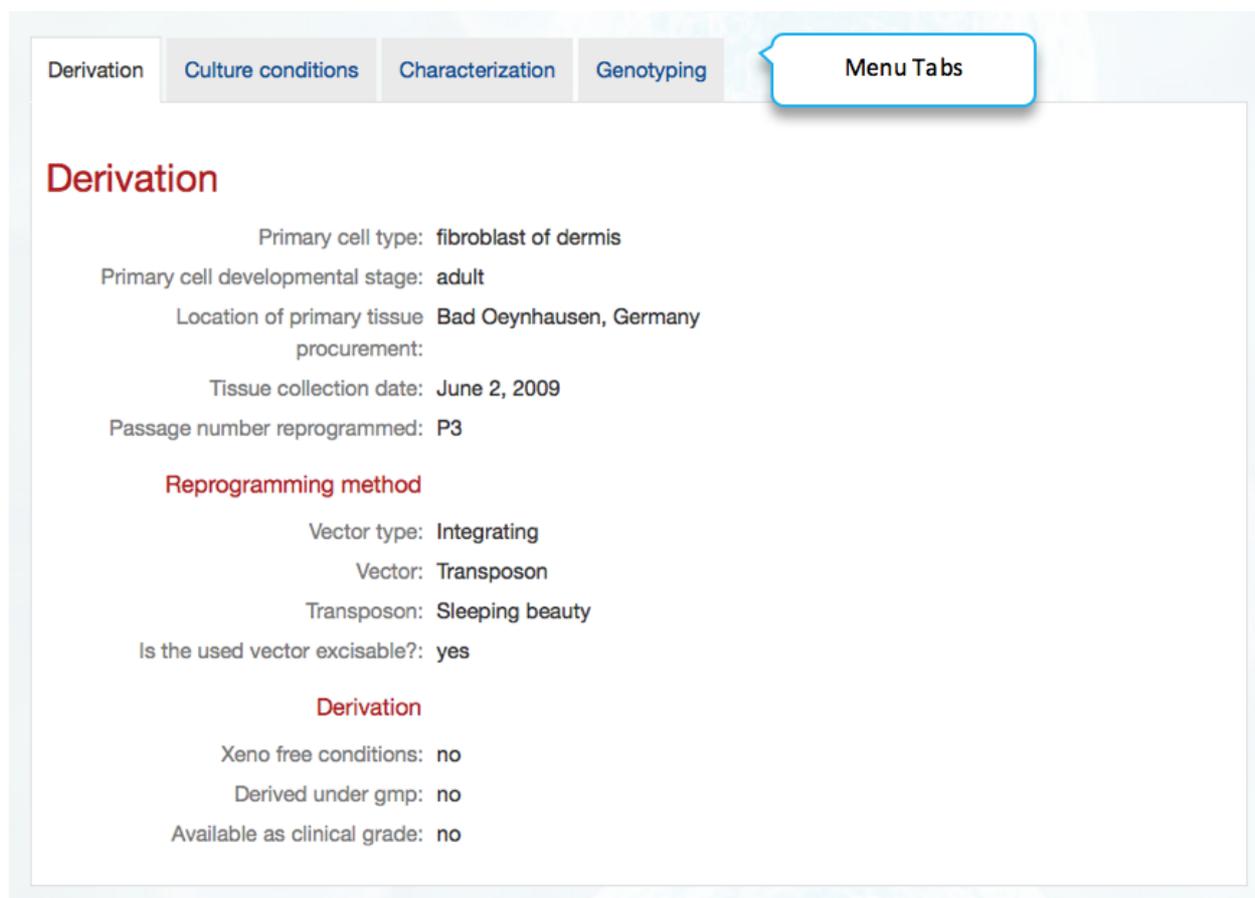
In stock

Cell Line Information Pack

Further down the page you can find additional information about the cell line and how it was created. The depositor provided this information when registering the line in [hPSCreg](http://hpscereg.eu) (<http://hpscereg.eu>).

This information is displayed in a single box with four tabs: derivation, culture conditions, characterisation and genotyping.

The derivation tab displays details of how the line was reprogrammed and when the source tissue was collected.



The screenshot shows a web interface with four tabs: Derivation, Culture conditions, Characterization, and Genotyping. The Derivation tab is selected and highlighted in red. A callout box labeled 'Menu Tabs' points to the tabs. The content of the Derivation tab is as follows:

Derivation

Primary cell type: fibroblast of dermis
Primary cell developmental stage: adult
Location of primary tissue: Bad Oeynhausen, Germany
procurement:
Tissue collection date: June 2, 2009
Passage number reprogrammed: P3

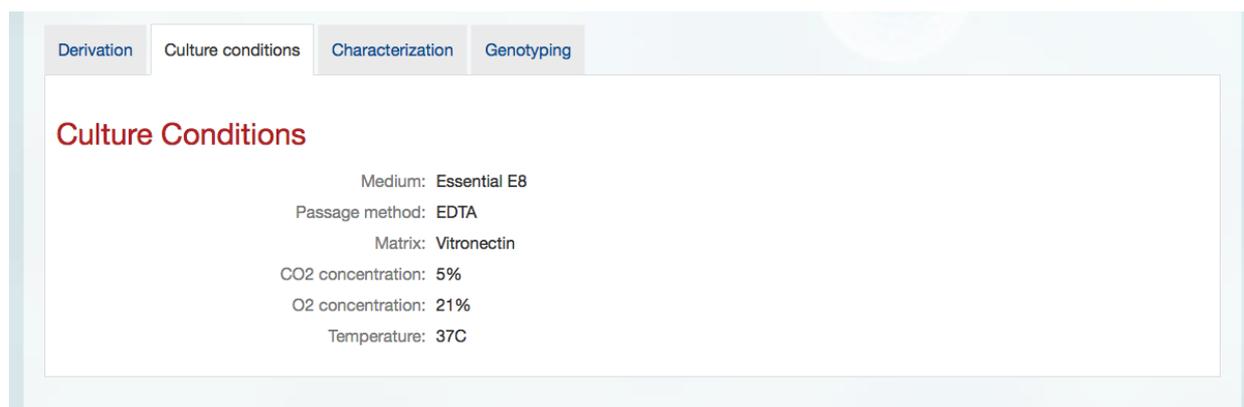
Reprogramming method

Vector type: Integrating
Vector: Transposon
Transposon: Sleeping beauty
Is the used vector excisable?: yes

Derivation

Xeno free conditions: no
Derived under gmp: no
Available as clinical grade: no

The culture conditions tab gives information about how the cell line has been cultured.

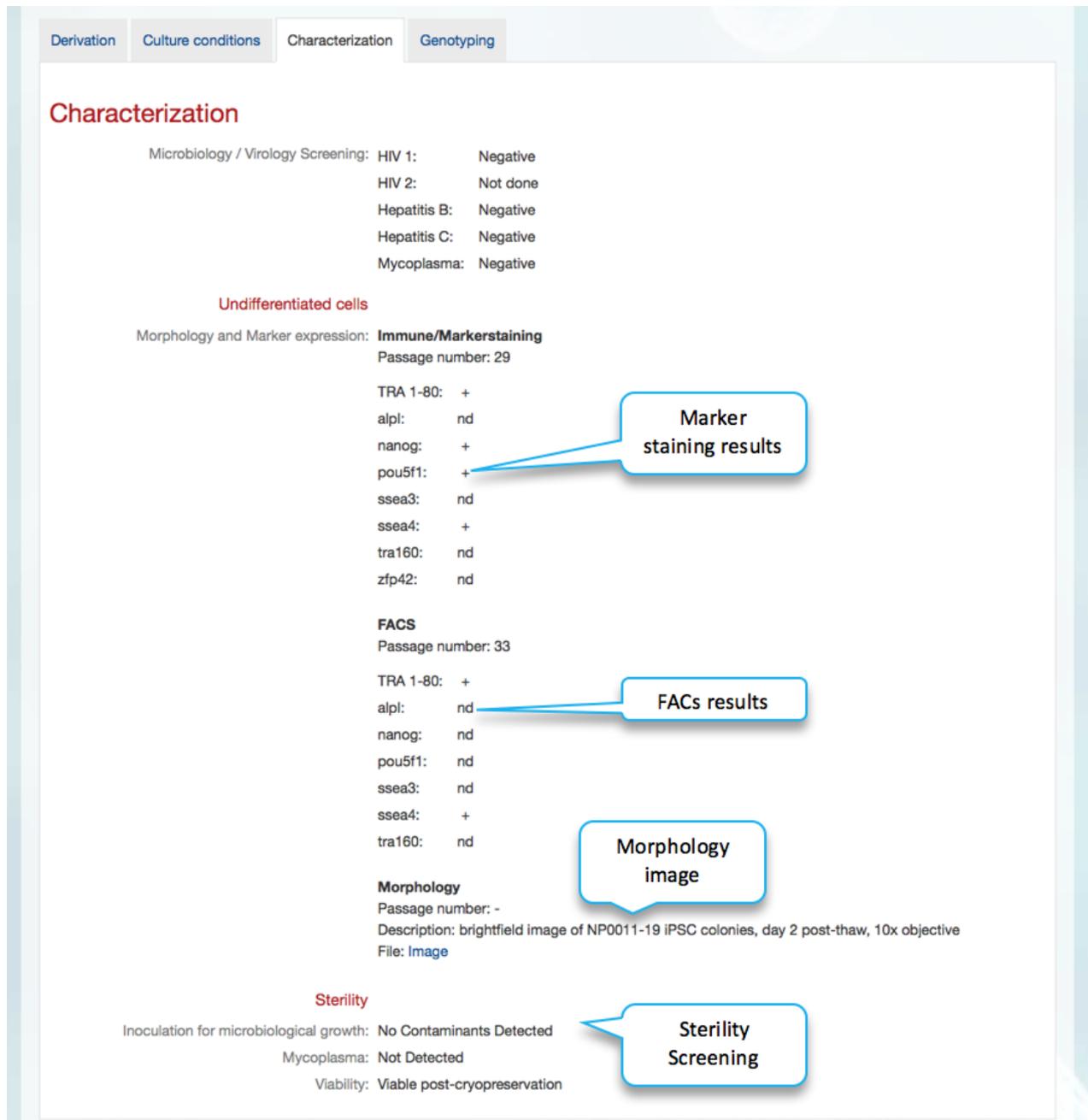


The screenshot shows the same web interface with the Culture conditions tab selected and highlighted in blue. The content of the Culture Conditions tab is as follows:

Culture Conditions

Medium: Essential E8
Passage method: EDTA
Matrix: Vitronectin
CO2 concentration: 5%
O2 concentration: 21%
Temperature: 37C

The **characterization tab** gives details of what sterility, morphology and marker screening has been carried out on a particular cell line.



Characterization

Microbiology / Virology Screening: HIV 1: Negative
HIV 2: Not done
Hepatitis B: Negative
Hepatitis C: Negative
Mycoplasma: Negative

Undifferentiated cells

Morphology and Marker expression: **Immune/Markerstaining**
Passage number: 29

TRA 1-80:	+
alpl:	nd
nanog:	+
pou5f1:	+
ssea3:	nd
ssea4:	+
tra160:	nd
zfp42:	nd

FACS
Passage number: 33

TRA 1-80:	+
alpl:	nd
nanog:	nd
pou5f1:	nd
ssea3:	nd
ssea4:	+
tra160:	nd

Morphology
Passage number: -
Description: brightfield image of NP0011-19 iPSC colonies, day 2 post-thaw, 10x objective
File: [Image](#)

Sterility

Inoculation for microbiological growth: No Contaminants Detected
Mycoplasma: Not Detected
Viability: Viable post-cryopreservation

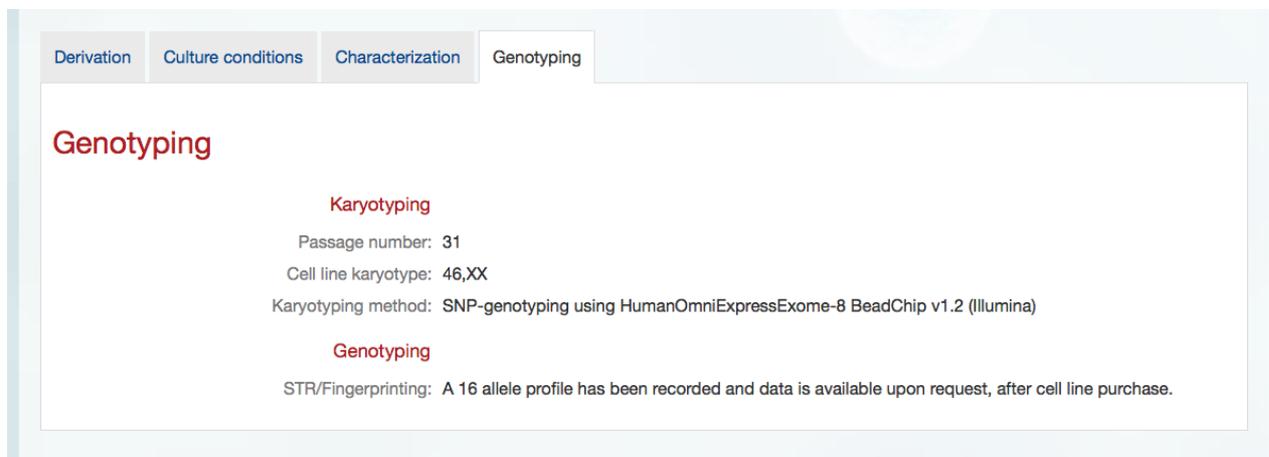
Marker staining results

FACs results

Morphology image

Sterility Screening

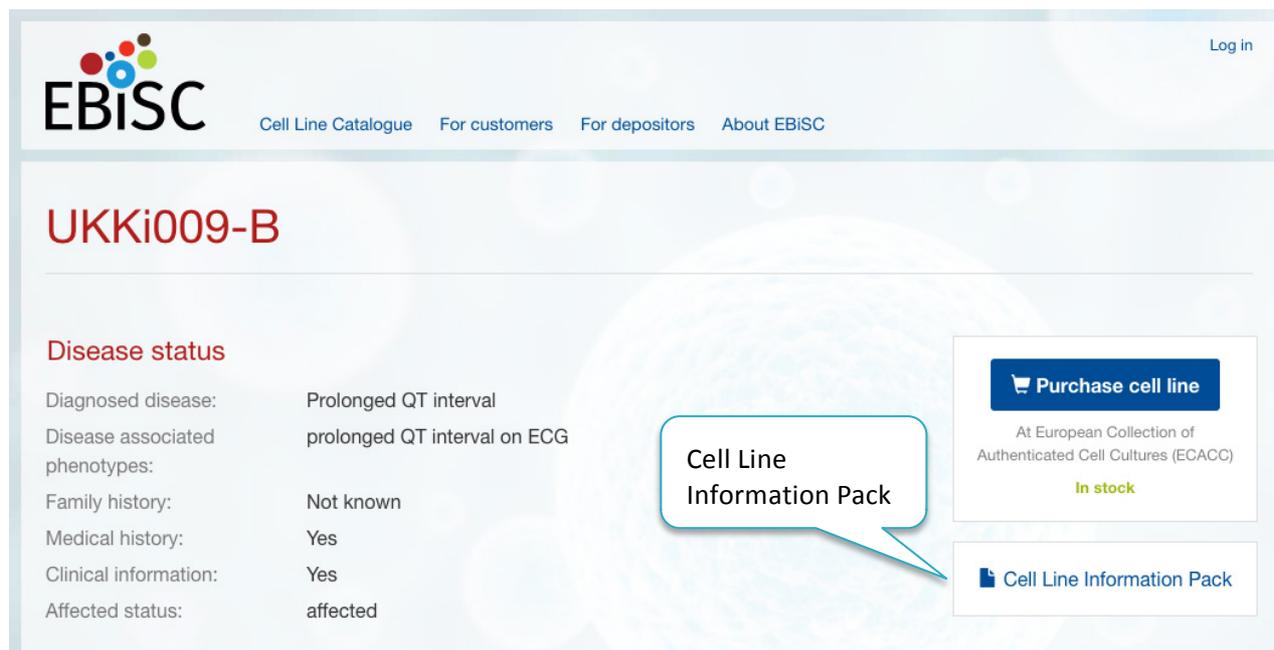
The **genotyping tab** contains information about any karyotyping and genotyping that has been conducted on the line.



The screenshot shows the 'Genotyping' tab selected in a navigation menu. The main content area is titled 'Genotyping' and contains two sections:

- Karyotyping**
 - Passage number: 31
 - Cell line karyotype: 46,XX
 - Karyotyping method: SNP-genotyping using HumanOmniExpressExome-8 BeadChip v1.2 (Illumina)
- Genotyping**
 - STR/Fingerprinting: A 16 allele profile has been recorded and data is available upon request, after cell line purchase.

CLIP – Cell line Information Pack



The screenshot shows the cell line page for UKKi009-B. The page includes the EBiSC logo, navigation links, and a 'Disease status' table. A callout box points to a 'Cell Line Information Pack' link.

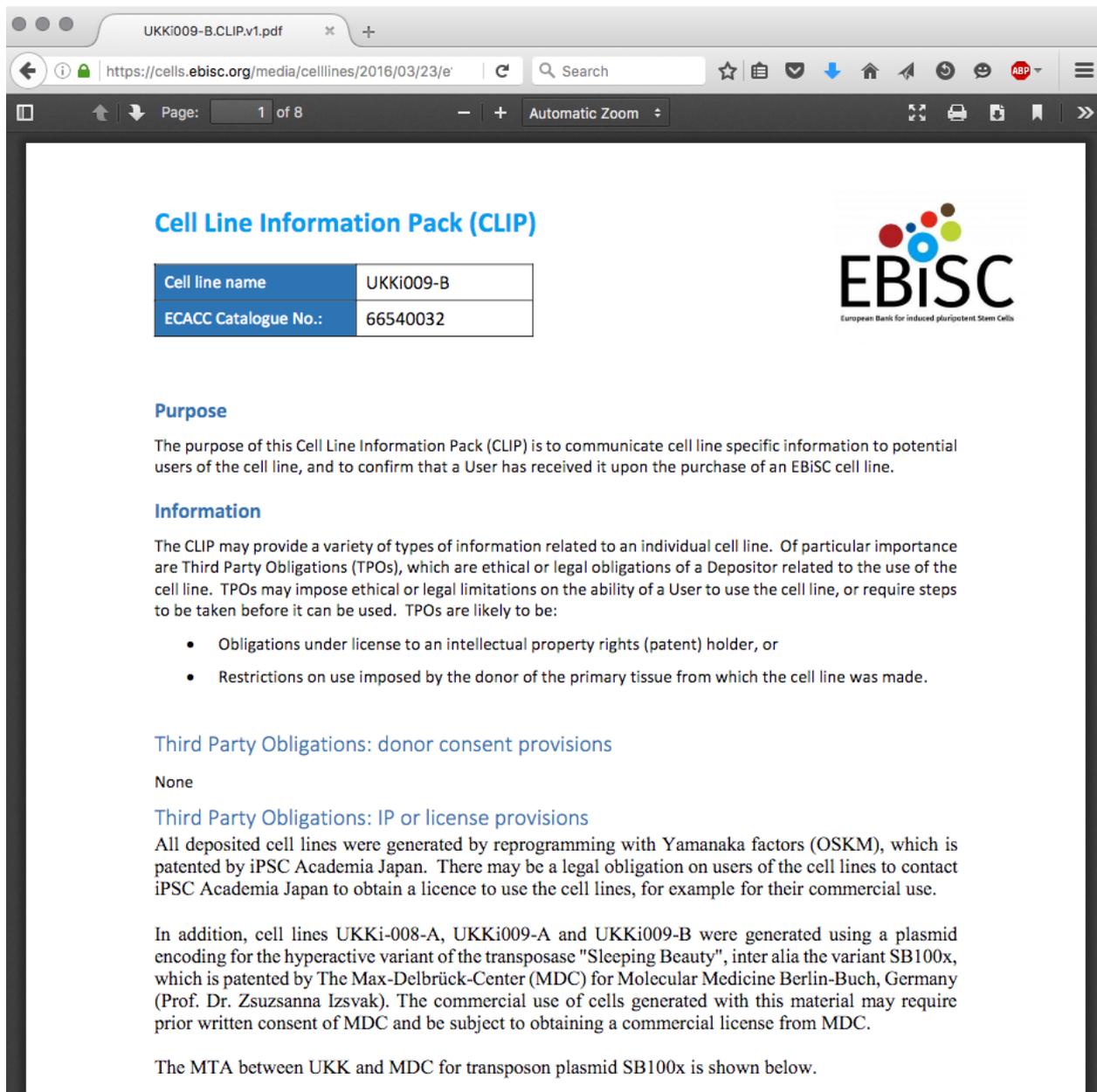
Disease status	
Diagnosed disease:	Prolonged QT interval
Disease associated phenotypes:	prolonged QT interval on ECG
Family history:	Not known
Medical history:	Yes
Clinical information:	Yes
Affected status:	affected

Cell Line Information Pack

[Purchase cell line](#)
At European Collection of Authenticated Cell Cultures (ECACC)
In stock

[Cell Line Information Pack](#)

The Cell Line Information Pack contains additional information about each cell line, including any associated third party obligations or license provisions. You can find the link to the Cell Line Information Pack at the top right side of the page.



Cell Line Information Pack (CLIP)

Cell line name	UKKi009-B
ECACC Catalogue No.:	66540032

Purpose

The purpose of this Cell Line Information Pack (CLIP) is to communicate cell line specific information to potential users of the cell line, and to confirm that a User has received it upon the purchase of an EBiSC cell line.

Information

The CLIP may provide a variety of types of information related to an individual cell line. Of particular importance are Third Party Obligations (TPOs), which are ethical or legal obligations of a Depositor related to the use of the cell line. TPOs may impose ethical or legal limitations on the ability of a User to use the cell line, or require steps to be taken before it can be used. TPOs are likely to be:

- Obligations under license to an intellectual property rights (patent) holder, or
- Restrictions on use imposed by the donor of the primary tissue from which the cell line was made.

Third Party Obligations: donor consent provisions

None

Third Party Obligations: IP or license provisions

All deposited cell lines were generated by reprogramming with Yamanaka factors (OSKM), which is patented by iPSC Academia Japan. There may be a legal obligation on users of the cell lines to contact iPSC Academia Japan to obtain a licence to use the cell lines, for example for their commercial use.

In addition, cell lines UKKi-008-A, UKKi009-A and UKKi009-B were generated using a plasmid encoding for the hyperactive variant of the transposase "Sleeping Beauty", inter alia the variant SB100x, which is patented by The Max-Delbrück-Center (MDC) for Molecular Medicine Berlin-Buch, Germany (Prof. Dr. Zsuzsanna Izsvak). The commercial use of cells generated with this material may require prior written consent of MDC and be subject to obtaining a commercial license from MDC.

The MTA between UKK and MDC for transposon plasmid SB100x is shown below.

Cell Line Information Pack PDF

Cell line purchase

If you decide to purchase any of the lines in the EBiSC catalogue, you can do so by clicking on the "Purchase cell line" button on the right side of the page. This will lead you to the European Collection of Authenticated Cell Cultures ([ECACC](#)) website where you can buy the chosen line.

Disease status	
Diagnosed disease:	heart conduction disease
Disease stage:	Symptomatic
Disease associated phenotypes:	prolonged QT interval on ECG

 **Purchase cell line**

At European Collection of
Authenticated Cell Cultures (ECACC)

In stock

For details on how to complete your purchase please visit the comprehensive ECACC guide on [how to order cell lines](http://www.phe-culturecollections.org.uk/orderinginfo/index.aspx) (<http://www.phe-culturecollections.org.uk/orderinginfo/index.aspx>).