

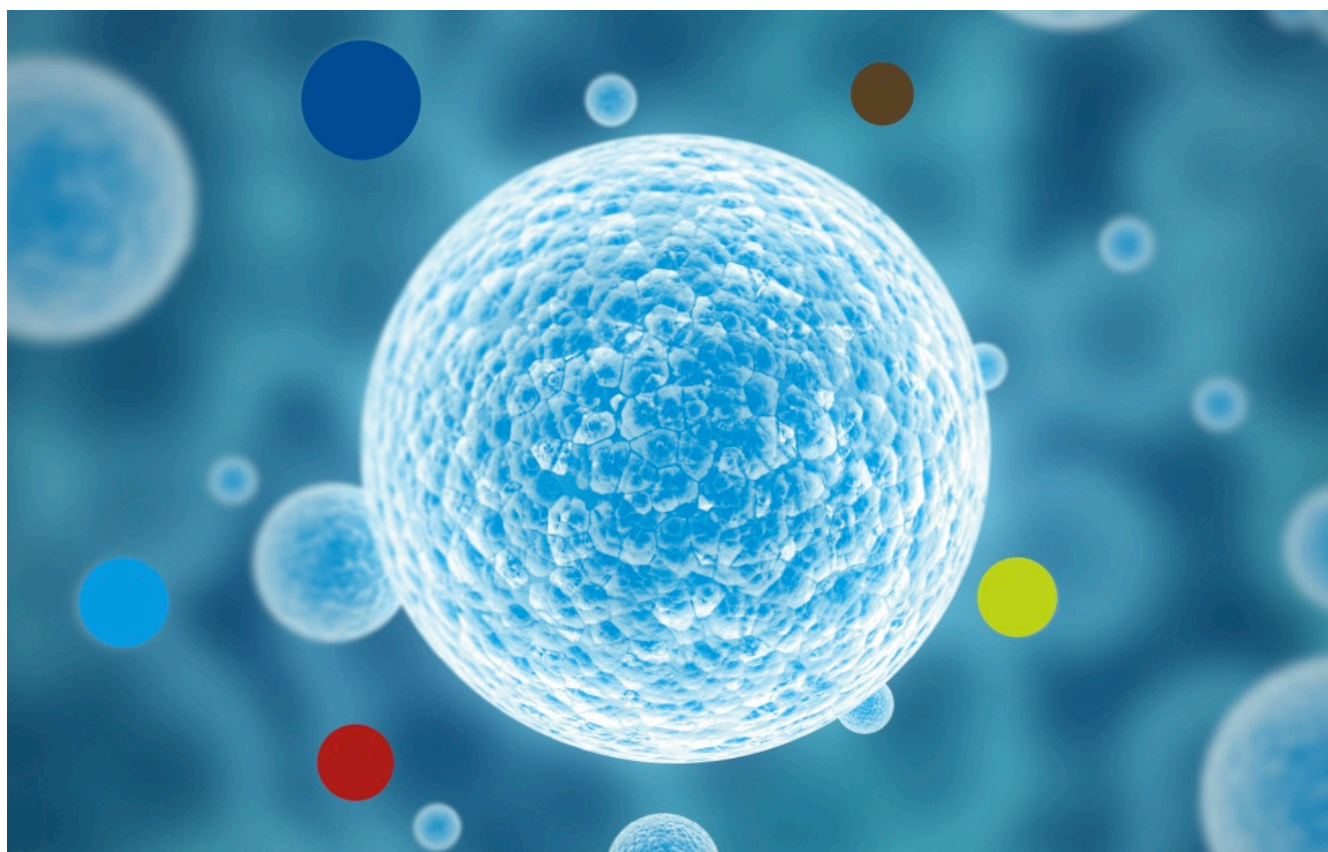


innovative
medicines
initiative



EBiSC Catalogue User Guide

European Bank for induced pluripotent Stem Cells



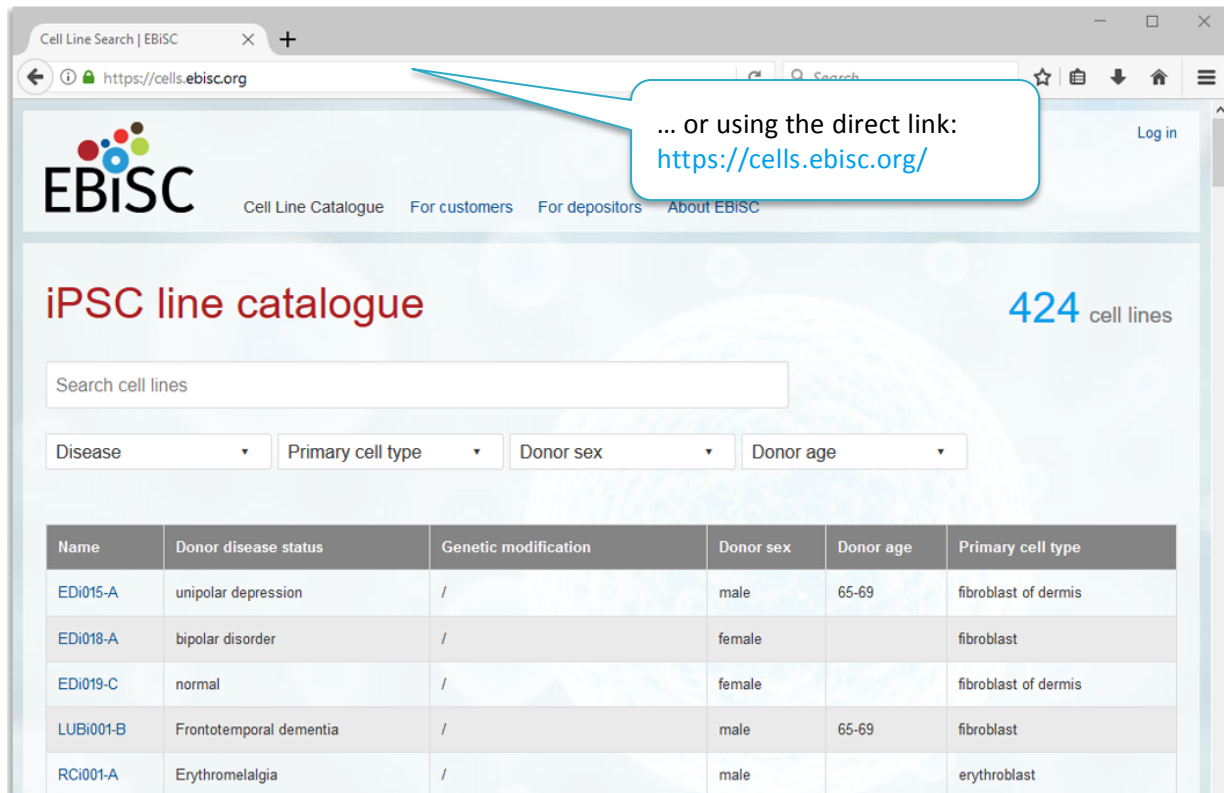
<https://cells.ebisc.org> & <http://ebisc.org/>

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, disease, donor age and sex, and cell type).

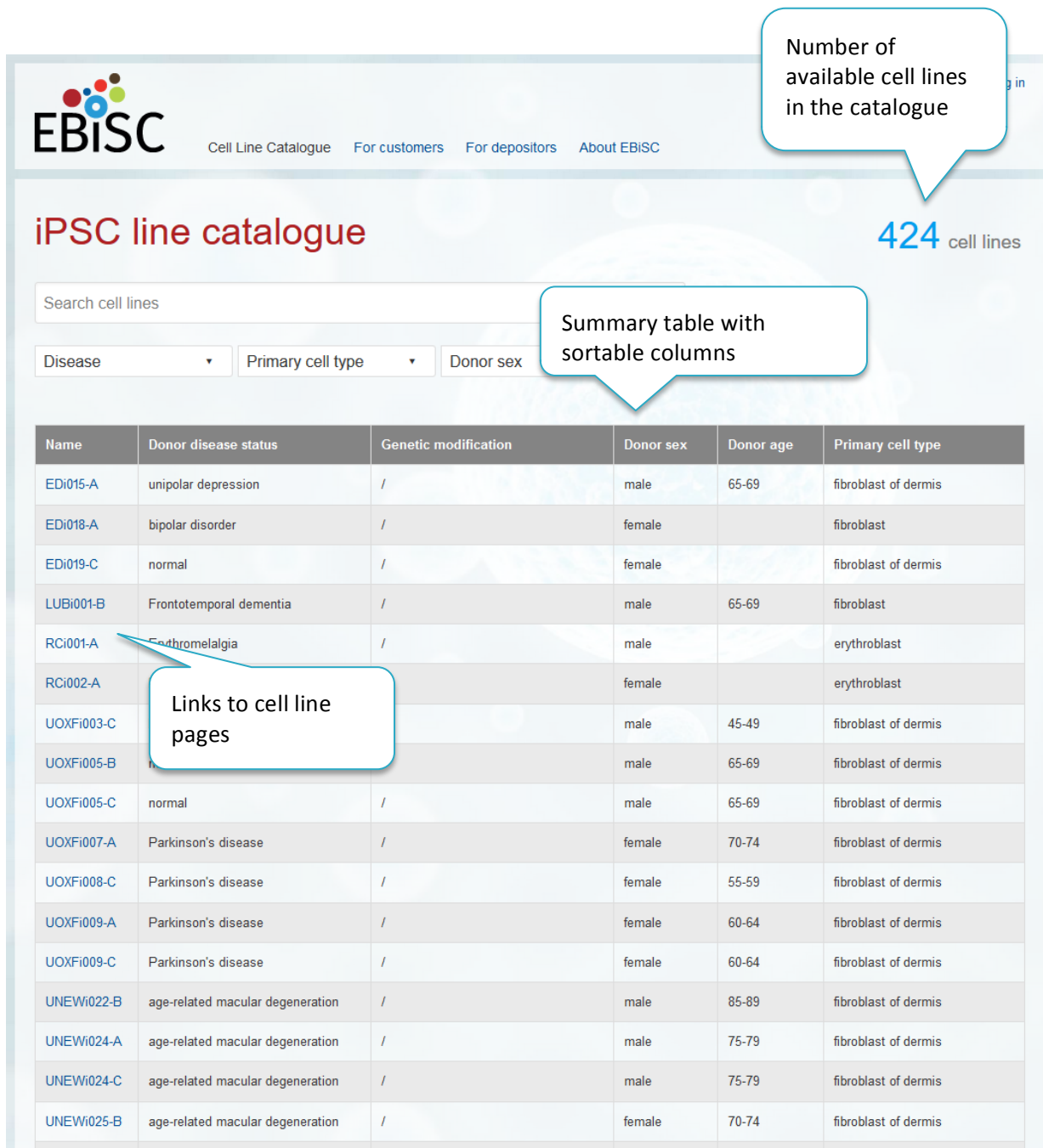
Accessing the Catalogue

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, genetic modification, primary cell type and donor sex and age. The name column links to a separate individual page for each cell line.



EBiSC Cell Line Catalogue For customers For depositors About EBiSC

iPSC line catalogue 424 cell lines

Search cell lines

Disease Primary cell type Donor sex

Number of available cell lines in the catalogue

Summary table with sortable columns

Name	Donor disease status	Genetic modification	Donor sex	Donor age	Primary cell type
EDi015-A	unipolar depression	/	male	65-69	fibroblast of dermis
EDi018-A	bipolar disorder	/	female		fibroblast
EDi019-C	normal	/	female		fibroblast of dermis
LUBi001-B	Frontotemporal dementia	/	male	65-69	fibroblast
RCi001-A	Euthromelalgia	/	male		erythroblast
RCi002-A			female		erythroblast
UOXFi003-C			male	45-49	fibroblast of dermis
UOXFi005-B			male	65-69	fibroblast of dermis
UOXFi005-C	normal	/	male	65-69	fibroblast of dermis
UOXFi007-A	Parkinson's disease	/	female	70-74	fibroblast of dermis
UOXFi008-C	Parkinson's disease	/	female	55-59	fibroblast of dermis
UOXFi009-A	Parkinson's disease	/	female	60-64	fibroblast of dermis
UOXFi009-C	Parkinson's disease	/	female	60-64	fibroblast of dermis
UNEWi022-B	age-related macular degeneration	/	male	85-89	fibroblast of dermis
UNEWi024-A	age-related macular degeneration	/	male	75-79	fibroblast of dermis
UNEWi024-C	age-related macular degeneration	/	male	75-79	fibroblast of dermis
UNEWi025-B	age-related macular degeneration	/	female	70-74	fibroblast of dermis

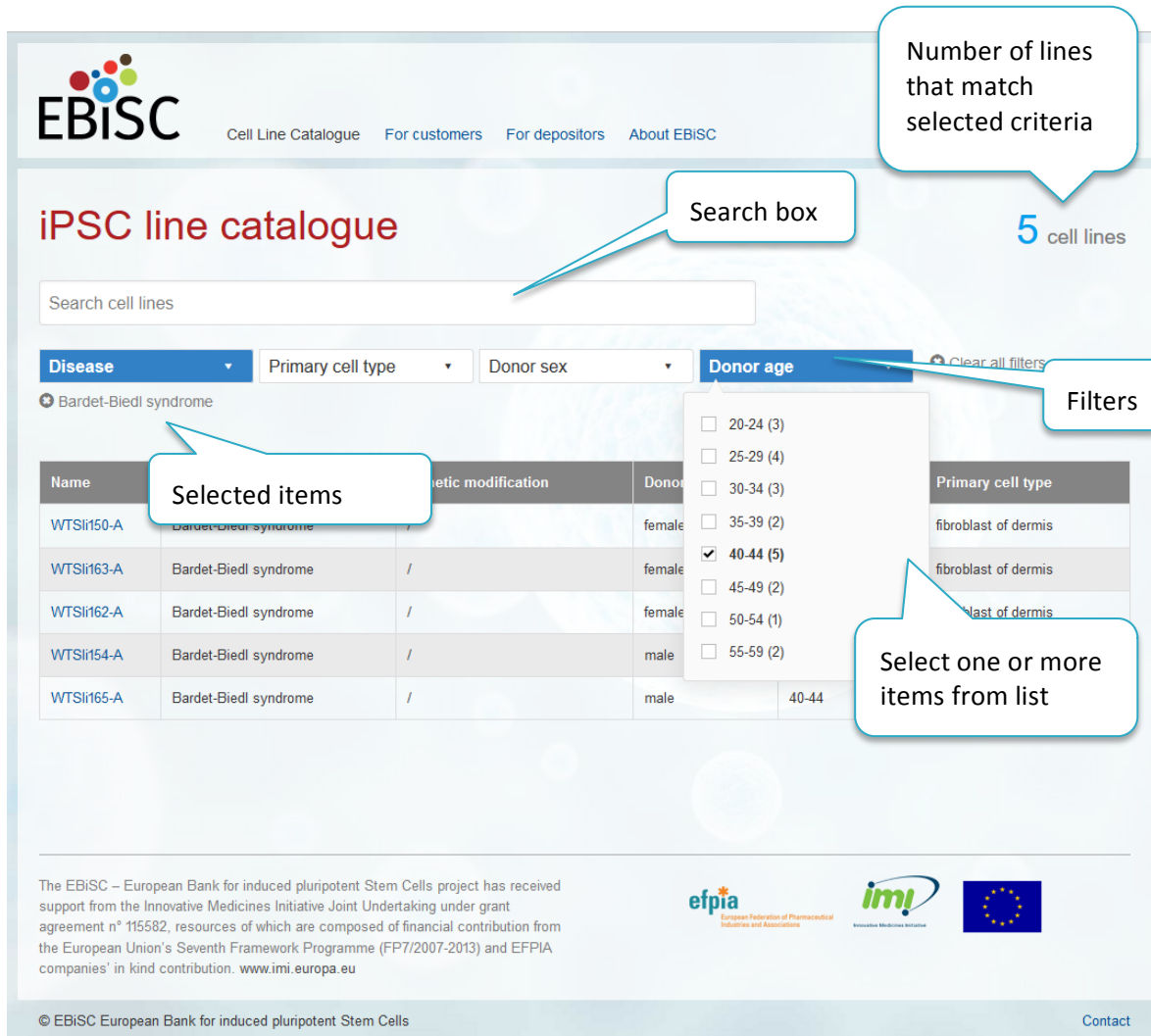
Links to cell line pages

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. The top navigation bar includes the EBiSC logo and links for 'Cell Line Catalogue', 'For customers', 'For depositors', and 'About EBiSC'. The main heading is 'iPSC line catalogue'. A search box is located below the heading. Below the search box are four filter dropdowns: 'Disease', 'Primary cell type', 'Donor sex', and 'Donor age'. The 'Disease' filter is currently set to 'Bardet-Biedl syndrome'. The 'Donor age' filter is open, showing a list of age ranges with the number of matching cell lines in parentheses. The '40-44 (5)' option is selected. The 'Primary cell type' filter is also open, showing 'fibroblast of dermis' as the selected option. The main table displays a list of cell lines with columns for Name, Disease, Genetic modification, Donor sex, Donor age, and Primary cell type. The table shows five cell lines, all with 'Bardet-Biedl syndrome' as the disease and 'fibroblast of dermis' as the primary cell type. The 'Donor age' column shows '40-44' for the last two cell lines. Annotations with callouts point to various elements: 'Number of lines that match selected criteria' points to the '5 cell lines' text; 'Search box' points to the search input field; 'Filters' points to the filter dropdowns; 'Selected items' points to the 'Bardet-Biedl syndrome' text; and 'Select one or more items from list' points to the '40-44 (5)' option in the 'Donor age' dropdown.

Number of lines that match selected criteria
5 cell lines

Search box

Search cell lines

Disease Primary cell type Donor sex Donor age Clear all filters

Bardet-Biedl syndrome

Selected items

Genetic modification Donor sex Donor age Primary cell type

WTSir150-A Bardet-Biedl syndrome / female 40-44 fibroblast of dermis

WTSir163-A Bardet-Biedl syndrome / female 40-44 fibroblast of dermis

WTSir162-A Bardet-Biedl syndrome / female 40-44 fibroblast of dermis

WTSir154-A Bardet-Biedl syndrome / male 40-44 fibroblast of dermis

WTSir165-A Bardet-Biedl syndrome / male 40-44 fibroblast of dermis

20-24 (3)
25-29 (4)
30-34 (3)
35-39 (2)
40-44 (5)
45-49 (2)
50-54 (1)
55-59 (2)

fibroblast of dermis

Select one or more items from list

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efpia European Federation of Pharmaceutical Industries and Associations imi Innovative Medicines Initiative

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Currently available filters are: Disease, Primary Cell type, Donor sex and Donor age. 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

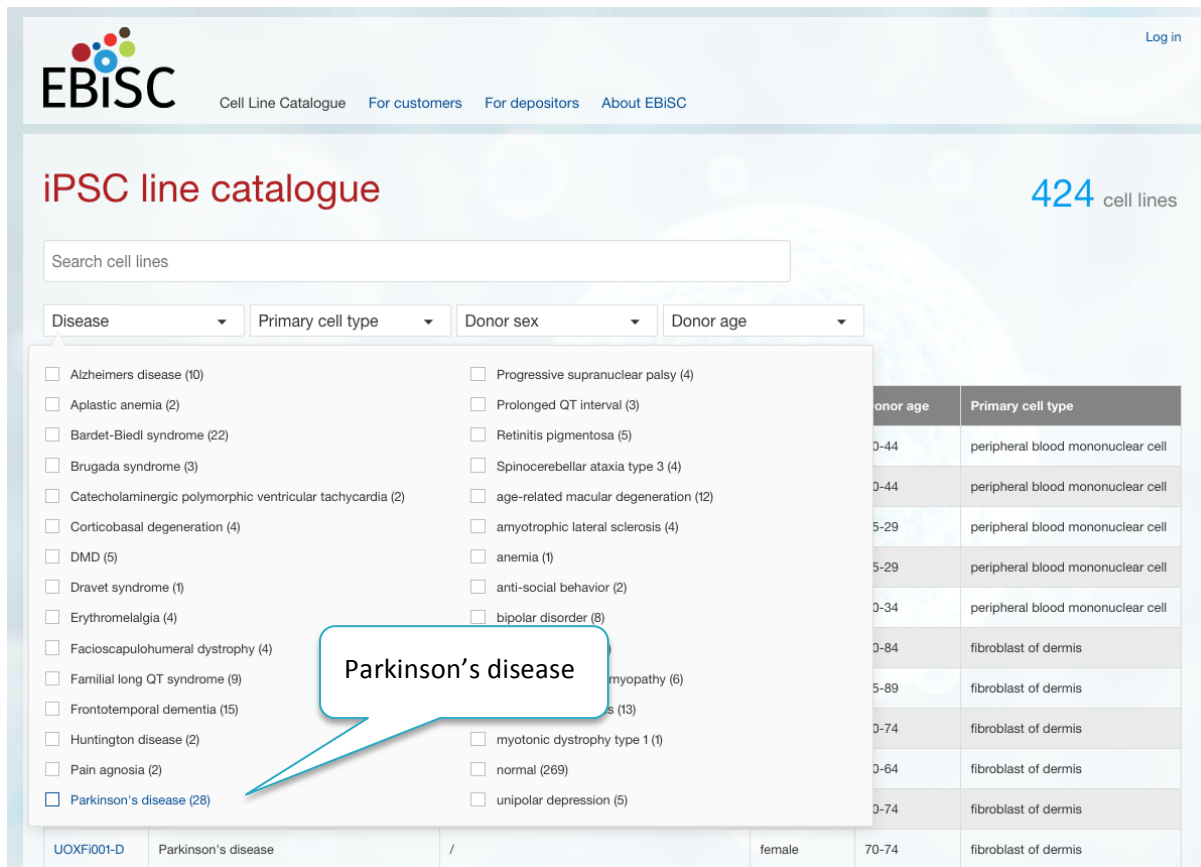
The search box above the filters enables broader searching. You can find lines based on other descriptive information associated with them, beyond what is displayed in the summary table.

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 Parkinson's disease and lines with mutations in SCNA.

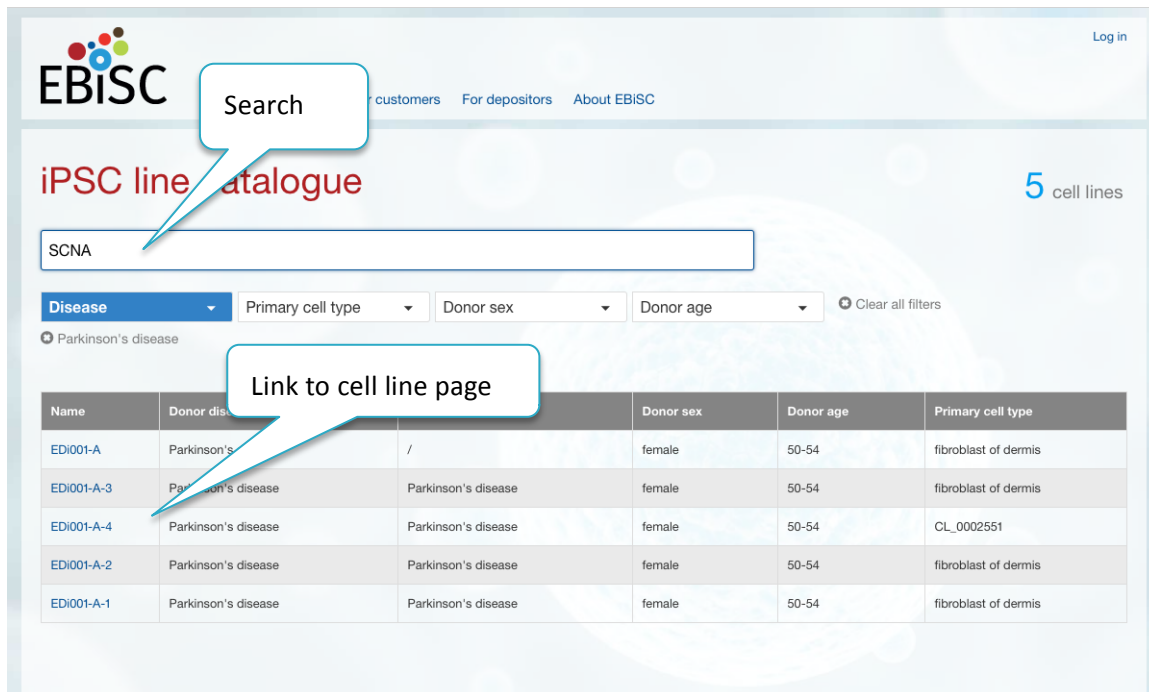
First, Anne looks at the disease dropdown filter. She sees Parkinson's disease and that there are 28 lines associated with that disease available in the EBiSC catalogue. Anne clicks on the Parkinson's disease check box and this filters the results in the summary table to 28 lines that are associated with this disease.



The screenshot shows the EBiSC iPSC line catalogue interface. At the top, the EBiSC logo and navigation links are visible. The main heading is "iPSC line catalogue" with a count of "424 cell lines". Below this is a search bar and four dropdown filters: Disease, Primary cell type, Donor sex, and Donor age. The "Disease" dropdown is open, showing a list of diseases with checkboxes and counts. "Parkinson's disease (28)" is highlighted with a blue box and a callout bubble. To the right, a table displays the search results for Parkinson's disease, showing columns for Donor age and Primary cell type.

Donor age	Primary cell type
0-44	peripheral blood mononuclear cell
0-44	peripheral blood mononuclear cell
5-29	peripheral blood mononuclear cell
5-29	peripheral blood mononuclear cell
0-34	peripheral blood mononuclear cell
0-84	fibroblast of dermis
5-89	fibroblast of dermis
0-74	fibroblast of dermis
0-64	fibroblast of dermis
0-74	fibroblast of dermis
0-74	fibroblast of dermis

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



The screenshot shows the EBiSC iPSC line catalogue search results for the query "SCNA". The search bar is highlighted with a callout "Search". Below the search bar, there are filters for Disease (Parkinson's disease), Primary cell type, Donor sex, and Donor age. A callout "Link to cell line page" points to the "Name" column of the table. The table displays five cell lines, all of which are subclones of EDi001-A.

Name	Donor disease	Primary cell type	Donor sex	Donor age	Primary cell type
EDi001-A	Parkinson's disease	/	female	50-54	fibroblast of dermis
EDi001-A-3	Parkinson's disease	Parkinson's disease	female	50-54	fibroblast of dermis
EDi001-A-4	Parkinson's disease	Parkinson's disease	female	50-54	CL_0002551
EDi001-A-2	Parkinson's disease	Parkinson's disease	female	50-54	fibroblast of dermis
EDi001-A-1	Parkinson's disease	Parkinson's disease	female	50-54	fibroblast of dermis


There are five lines with the SCNA gene in their description. This is actually a cell line and four genetically modified subclones of this line. This can be seen from the cell line name. All lines have the stem EDi001-A followed by a different number, 1, 2, 3 and 4.

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 cell line users](#)
[For cell line donors](#)

[Log in](#)

EDi001-A

Donor information

Gender: Female
Age: 50-54

Disease status

Disease: **Parkinson's disease**
This is a PD line, with the control being EDi002-A lines and CRISPR/Cas9-corrected EDi001-A-1, EDi001-A-2, EDi001-A-3 and EDi001-A-4

Affected: Yes

Disease variant

Gene: SCNA
Chromosome location: 4q22.1
Zygosity: Heterozygous

Description: The donor carries a triplication of the alpha-synuclein gene, resulting in 4 copies of SNCA. The copies of SNCA are situated in a heterozygous triplication configuration. See Figure 1 of Petrucci, 2015 for a graphic representation of the heterozygous triplication.

Disease associated phenotypes: Severe PD with dementia

Family history: Strong family history of Parkinson's disease due to autosomal dominant inheritance of SNCA triplication

Medical history: Y Mov Disord. 2011 Sep;26(11):2134-6. doi: 10.1002/mds.23776

General information

Depositor: University of Edinburgh
Cell line name: EDi001-A
Cell line alternative names: AST22, AST23, SAMEA3319992
Biosamples ID: [SAMEA3319992](#)
Derivation country: United States

Related lines

Subclones: [EDi001-A-1](#), [EDi001-A-2](#), [EDi001-A-3](#), [EDi001-A-4](#)
Lines from donor's relatives: [has daughter \(disease status: normal\) EDi002-A](#)

Donor information

Cell line availability


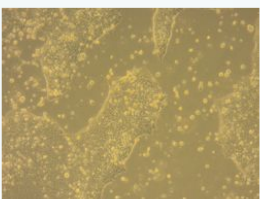
Link to ECACC online store, where you can purchase the cell line

Disease information

Depositor

Related lines: subclones, lines from donor's relatives

Cell Line Information Pack

Timepoint: Confluence
Magnification: 4x

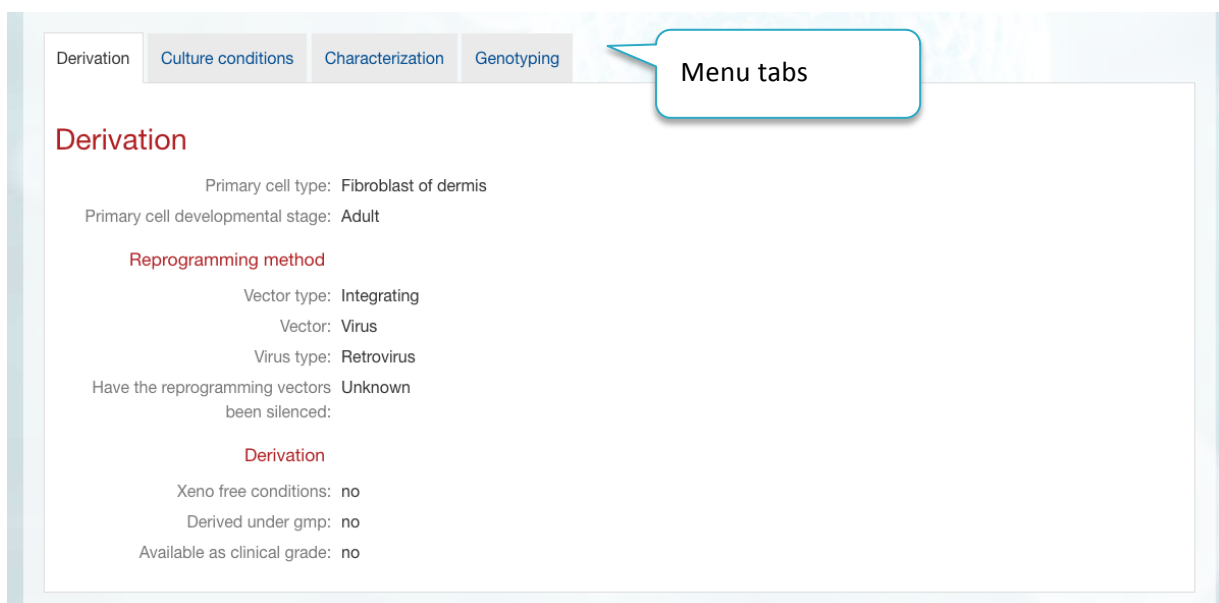
Timepoint: Confluence
Magnification: 10x

Example images of the cell line if available

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 five tabs: derivation, culture conditions, characterisation, genotyping and genetic modification (only for gene-edited lines).

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



The screenshot shows the 'Derivation' tab selected in a menu bar. A callout box labeled 'Menu tabs' points to the menu bar. The main content area displays the following information:

- Primary cell type: Fibroblast of dermis
- Primary cell developmental stage: Adult
- Reprogramming method**
 - Vector type: Integrating
 - Vector: Virus
 - Virus type: Retrovirus
 - Have the reprogramming vectors been silenced: Unknown
- 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 'Culture conditions' tab selected in a menu bar. The main content area displays the following information:

- Medium: mTeSR
- Passage method: EDTA
- Matrix: Matrigel / Geltrex
- 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.

Derivation
Culture conditions
Characterization
Genotyping

Characterization

Analysis of Undifferentiated Cells

Marker expression:

Marker	Expressed	Immunostaining	RT-PCR	FACS	Enzymatic Assay	Expression Profiles
SSEA-1	No			✓		
TRA 1-60	✓ Yes			✓		
POU5F1 (OCT-4)	✓ Yes			✓		
SSEA-4	✓ Yes			✓		

Differentiation potency

Ectoderm: **Ectoderm**

✓ In vitro spontaneous differentiation

Marker	Expressed
HES5	✓ Yes
NeuroD1	✓ Yes
PAX6	✓ Yes

Endoderm: **Endoderm**

✓ In vitro spontaneous differentiation

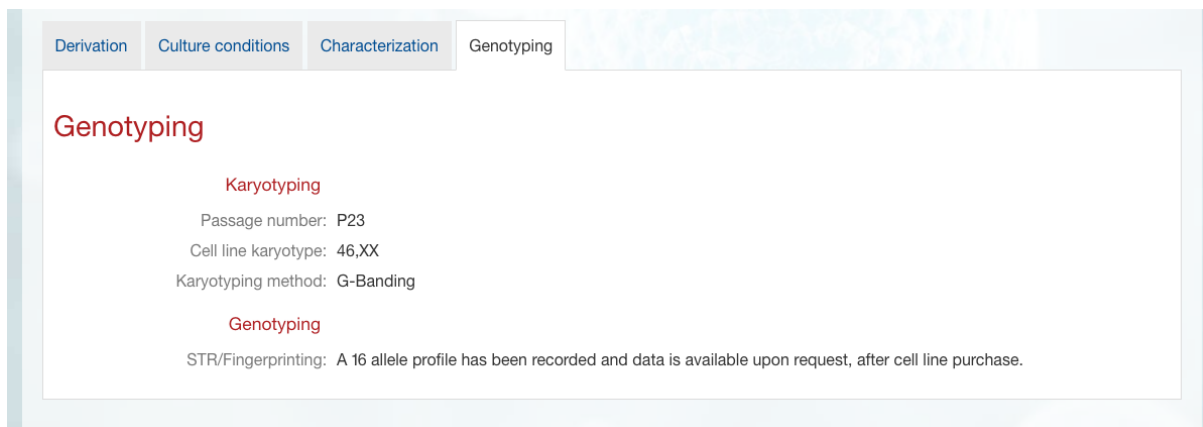
Marker	Expressed
CXCR4	✓ Yes
GATA6	✓ Yes
SOX17	✓ Yes

Mesoderm: **Mesoderm**

✓ In vitro spontaneous differentiation

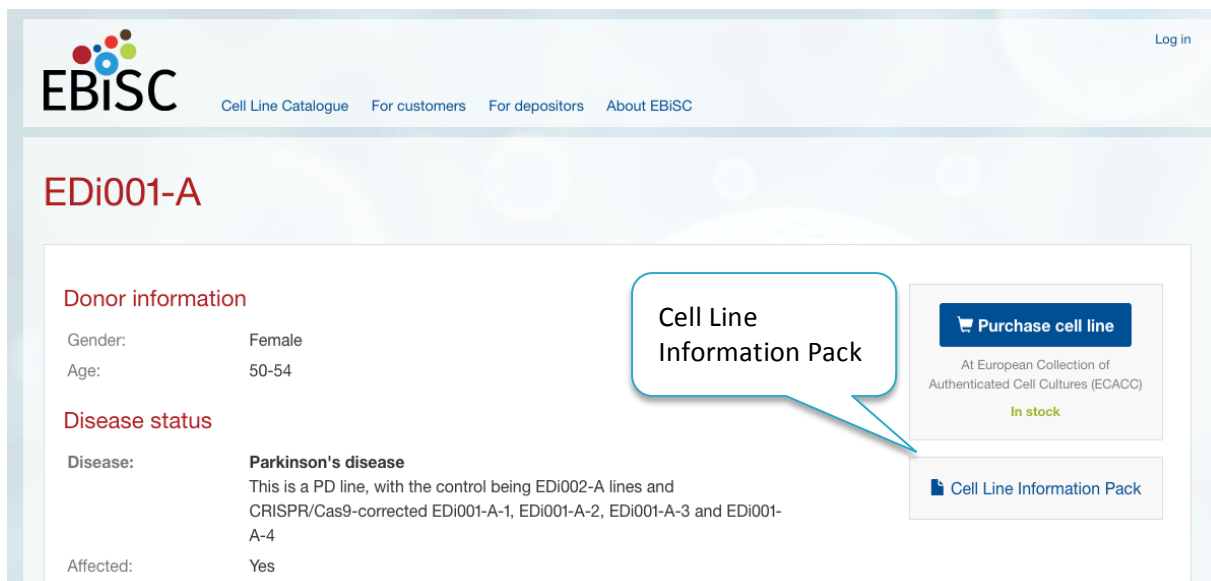
Marker	Expressed
NCAM1	✓ Yes
PECAM1	✓ Yes
VIM	✓ Yes

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 the top navigation bar. Below the tab, the heading 'Genotyping' is displayed in red. Underneath, there are two sections: 'Karyotyping' and 'Genotyping'. The 'Karyotyping' section lists: Passage number: P23, Cell line karyotype: 46,XX, and Karyotyping method: G-Banding. The 'Genotyping' section lists: 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 EBiSC Cell Line Catalogue interface. The top navigation bar includes the EBiSC logo, 'Cell Line Catalogue', 'For customers', 'For depositors', and 'About EBiSC'. A 'Log in' link is in the top right. The main heading is 'EDi001-A'. Below this, there are two sections: 'Donor information' and 'Disease status'. The 'Donor information' section lists: Gender: Female, Age: 50-54. The 'Disease status' section lists: Disease: Parkinson's disease, This is a PD line, with the control being EDi002-A lines and CRISPR/Cas9-corrected EDi001-A-1, EDi001-A-2, EDi001-A-3 and EDi001-A-4, Affected: Yes. On the right side, there is a 'Purchase cell line' button with a shopping cart icon, followed by the text 'At European Collection of Authenticated Cell Cultures (ECACC)' and 'In stock'. Below this is a 'Cell Line Information Pack' button with a document icon. A speech bubble points to the 'Cell Line Information Pack' button with the text '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	EDi001-A
ECACC Catalogue No.	66540058



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

The cell line is made using technologies / IP owned by IPS Academia Japan which will affect the permitted use of the Banked Material by any User to whom it is distributed. A licence may be required from IPS Academia Japan to use the cell lines for commercial purposes.

Other information

None

User acknowledgement

Please sign below to indicate that you have read and acknowledge the information contained in this CLIP.

Name _____

Position _____

Signature _____

Date _____


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.

Donor information

Gender: Female
Age: 35-39
Ethnicity: Caucasian, German
Donor karyotype: 46,XX

 **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>).