How to Import Existing Cell Inventory Data into Cellseeker

Step 1: Create Your Virtual Storage

Before importing your existing inventory data into Cellseeker, you need to set up your virtual storage. Follow these steps:

- 1. Navigate to the INVENTORY page.
- 2. Click the '+' (New Tank) button.
- 3. In the dialog box, specify:
 - The name and dimensions of your physical storage.
 - The rack labeling system (numbers or letters).

Step 2: Download and Populate the Excel Template

Cellseeker provides an Excel template for importing inventory data. Each row in the template corresponds to a single cryovial at a specific location in your storage. The columns are grouped into three categories: Location-related fields, Cell line-related fields, and Stock-related fields.

1. Location-Related Fields

These columns specify the exact location of each vial.

- Tank*: Name of the tank. This field must exactly match one of the tanks in your virtual storage.
- **Rack***: Label of the rack, either a number (e.g., 1, 2, 3) or a letter (e.g., A, B, C), depending on your labeling system.
- **Box***: Position of the box within the rack (e.g., 1, 2, 3).
- **Position***: Position of the vial within the box, specified as a number (e.g., 1, 2, 3) or a coordinate consisting of a letter and a number (e.g., A1, A2, A3).

Example:

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| A | A2 \checkmark : $\times \checkmark f_x \checkmark$ Tank1 | | | | | | | | | | | | | | |
| | А | В | с | D | E | F | G | н | 1 | J | к | L | | | |
| 1 | Tank | Rack | Box | Position | Cell line | Clone | Source | Lot ID | Passage | Cells / vial | Freezing date | Comment | • | | |
| 2 | Tank 1 | A | 2 | 2 A1 | HEK | | | HEK-lot001 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 3 | Tank 1 | A | 2 | 2 A2 | HEK | | | HEK-lot001 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |

2. Cell Line-Related Fields

Each cell line is represented as a separate record in Cellseeker. To simplify the import process, only basic information is required in the import sheet. During import, a new entry will be created for each unique combination of cell line-related fields (Cell Line, Clone, and Source). This means that if any of these fields differ, a separate cell line entry will be created and associated with the vial.

Cell Line names can uniquely identify each entry, but you may also use Clone and Source fields for further differentiation (see examples). After import, you can edit cell line names and other details as needed.

- Cell Line*: The name of your cell line.
- Clone (Optional): Used to distinguish different clones of the same cell line.
 - Note: Clones with identical cell line names will be treated as separate cells.
- **Source** (Optional): Used to specify the source of the cells, such as supplier or origin.
 - Note: Different sources with identical cell line names will also be treated as separate cells.

Tip: To minimize errors, only use the optional Clone and Source fields *if your data is already structured in this way and remains consistent for each vial from the same origin*. Merging entries after import is not possible, but you can manually edit and rename them within Cellseeker.

Examples: Both examples will result in the generation of four different cell lines in Cellseeker regardless the naming strategy.

Example 1: Using only Cell Line

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| A2 ~ | A2 \rightarrow : $\times \checkmark f_x \checkmark$ Tank1 | | | | | | | | | | | | | |
| A | В | с | D | E | F | G | н | 1 | J | к | | L | | |
| 1 Tank | Rack | Box | Position | Cell line | Clone | Source | Lot ID | Passage | Cells / vial | Freezing date | Comment | | | |
| 2 Tank 1 | A | 2 | | 1 HEK source 1 clone a1 | | | Lot1 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 3 Tank 1 | Α | 2 | 1 | 2 HEK source 1 clone a1 | | | Lot1 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 4 Tank 1 | Α | 2 | : : | 3 HEK source 1 clone a1 | | | Lot1 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 5 Tank 1 | Α | 2 | 4 | 4 HEK source 1 clone a2 | | | Lot2 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 6 Tank 1 | Α | 2 | 1 | 5 HEK source 1 clone a2 | | | Lot2 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 7 Tank 1 | Α | 2 | | 6 HEK source 1 clone a2 | | | Lot2 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 8 Tank 1 | Α | 2 | 1 | 7 HEK source 2 clone a1 | | | Lot3 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 9 Tank 1 | Α | 2 | | 8 HEK source 2 clone a1 | | | Lot3 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |
| 10 Tank 1 | A | 2 | | 9 HEK clone c6 | | | Lot4 | p1 | 500000 | 2024-01-01 | Viability: 80% | | | |

Example 2: Using Cell Line, Clone, and Source

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| A2 | 2 $\sqrt{f_x} \sqrt{f_x}$ Tank 1 | | | | | | | | | | | | | |
| | А | В | с | D | E | F | G | н | 1 | J | к | | L | |
| 1 T | lank 🛛 | Rack | Box Po | sition Cell lin | ne | Clone | Source | Lot ID | Passage | Cells / vial | Freezing date | Comment | | |
| 2 T | 「ank 1 | A | 2 | 1 HEK | | a1 | source 1 | Lot1 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 3 T | 「ank 1 | A | 2 | 2 HEK | | a1 | source 1 | Lot1 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 4 T | Fank 1 | Α | 2 | 3 HEK | | a1 | source 1 | Lot1 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 5 T | Fank 1 | Α | 2 | 4 HEK | | a2 | source 1 | Lot2 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 6 T | Fank 1 | Α | 2 | 5 HEK | | a2 | source 1 | Lot2 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 7 T | Fank 1 | Α | 2 | 6 HEK | | a2 | source 1 | Lot2 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 8 T | 「ank 1 | Α | 2 | 7 HEK | | a1 | source 2 | Lot3 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 9 T | Fank 1 | Α | 2 | 8 HEK | | a1 | source 2 | Lot3 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |
| 10 T | Fank 1 | Α | 2 | 9 HEK | | c6 | | Lot4 | p1 | 500000 | 2024-01-01 | Viability: 80% | | |

3. Stock-Related Fields

In Cellseeker, a **stock** represents a collection of vials with identical characteristics, such as the same cell line, passage number, cell aliquot, and freezing date. During import, a new stock entry will be created for each unique combination of **cell line-related fields** (Cell Line, Clone, and Source) and **stock-related fields** (Lot ID, Passage Number, Aliquot, Freezing Date, and Comments). This means that if any of these fields differ, a separate stock will be created and associated with the vial.

If you already use unique stock identifiers, you can enter them in the **Lot ID** column. Alternatively, Cellseeker can automatically generate **Lot IDs**, which serve as unique identifiers (see examples). Enabling this option overrides any values entered in the Lot ID column of your import sheet.

- · Lot ID: Required only if you use your own unique stock identifiers.
 - Note: Lot IDs can not be edited after the stock creation!
- Passage Number: Specifies the passage number of the stock.

- Aliquot (cells/vial): Number of cells per vial. Use numeric values (e.g., 5000000 or 5E+06). Avoid text formats like "5 million" or "T75", as such details should be added to the **Comments** field.
- Freezing Date: The date the stock was frozen. Accepted formats include Excel date format or text in YYYY-MM-DD.
- Comments: Field for additional notes about the stock.

Examples:

Example 1: Using your own Lot IDs If there are 7 vials for the same stock but some rows contain typos or missing fields, Cellseeker will treat these as separate stocks and throw errors because the Lot ID is not consistent.

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| A2 ~ | : [× 🗸] | fx ~ Tank | <1 | | | | | | | | | | | | | |
| A | В | С | D | | E | F | | G | | н | 1 | J | к | | L | |
| 1 Tank | Rack | Box | Position | Cell line | | Clone | Source | | Lot ID | | Passage | Cells / vial | Freezing date | Comment | | |
| 2 Tank 1 | A | 1 | 2 | 1 HEK | | | | | L001 | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 3 Tank 1 | Α | 1 | 2 : | 2 HEK | | | | | L001 | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 4 Tank 1 | Α | 1 | 2 3 | 3 HEK | | | | | L001 | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 5 Tank 1 | Α | 1 | 2 4 | 4 HEK | | | | | L001 | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 6 Tank 1 | Α | 1 | 2 | 5 HEK | | | | | L001 | | P5 | 500000 | 2024-01-15 | GFP hihg | | |
| 7 Tank 1 | Α | 1 | 2 (| 6 HEK | | | | | L001 | | P 5 | 500000 | 2024-01-15 | GFP high | | |
| 8 Tank 1 | Α | 1 | 2 | 7 HEK | | | | | L001 | | P5 | | 2024-01-15 | i GFP high | | |

Result: The system will separate four stocks:

- 1. Stock with Passage number "P5" and comment "GFP high" (4 vials)
- 2. Stock with Passage number "P5" and comment "GFP hihg" (1 vial due to typo in Comments)
- 3. Stock with Passage number "P 5" and comment "GFP high" (1 vial due to typo in Passage number)
- 4. Stock with Passage number "P5", comment "GFP high" and missing Cells/Vial field. (1 vial due to a missing field)

Due to the similar Lot ID ("L001" line 4, 5 and 6 will be annotated with the error "Lot ID already used")

Example 2: Using Generated Lot IDs When using generated Lot IDs, vials with inconsistent data in stock-related fields will be treated as separate stocks.

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| A2 ~ | : 🖂 🗸 | fx ~ Tank | <1 | | | | | | | | | | | | |
| A | В | С | D | | E | F | G | | н | 1 | J | к | | L | |
| 1 Tank | Rack | Box | Position | Cell line | | Clone | Source | Lot ID | | Passage | Cells / vial | Freezing date | Comment | | |
| 2 Tank 1 | A | 1 | 2 1 | 1 HEK | | | | | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 3 Tank 1 | A | 1 | 2 2 | 2 HEK | | | | | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 4 Tank 1 | Α | 1 | 2 3 | 3 HEK | | | | | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 5 Tank 1 | Α | 1 | 2 4 | 4 HEK | | | | | | P5 | 500000 | 2024-01-15 | GFP high | | |
| 6 Tank 1 | Α | | 2 8 | 5 HEK | | | | | | P5 | 500000 | 2024-01-15 | GFP hihg | | |
| 7 Tank 1 | A | 1 | 2 6 | 6 HEK | | | | | | P 5 | 500000 | 2024-01-15 | GFP high | | |
| 8 Tank 1 | Α | 1 | 2 7 | 7 HEK | | | | | | P5 | | 2024-01-15 | GFP high | | |

Result: The system will create the four separate stocks with unique Lot IDs without displaying any errors since the vials with identical stock and cell origins will be treated as identical stocks.

Step 3: Upload your Excel template and start the import process

During the import process, Cellseeker will validate the data and notify you of any errors, such as mismatched tank names or duplicate entries. You can download, work on your error file and reupload it again for validation. If you resolved all your problems annotated in the error file, complete the import process with the "Start import" button.

Additional Notes:

- 1. Ensure all required fields (marked with *) are populated correctly.
- Avoid copying rich text or formulas to the import sheet as they may include hidden content and cause problems. When copying data from your own formatted Excel sheet, use the "Paste as text" function (CTRL + SHIFT + V)
- 3. Always review the results of your import and feel free to contact our support if you are still facing problems.