

IDT CoA Checker

v 1.0.0

Usage

1. Select "Checker" tab in the left side panel.
2. Upload the relevant CoA file.
3. Upload the corresponding Order file.
4. Click on the "Check" button.
5. A report of the analysis should appear on the screen to the right of the buttons. (as shown in the picture below)
6. Click on the "Download" button to download the analysis table to your computer

The screenshot shows the IDT CoA Checker web application. The interface includes a left sidebar with a 'Checker' tab selected. The main area has two upload sections: 'Upload CoA File' and 'Upload Order File', both with 'Browse...' buttons and 'Upload complete' status. A 'Check' button is located below these sections. To the right, three summary boxes display: '# COA SEQUENC...' with value 1920, '# ORDER SEQUE...' with value 1920, and '# MATCHES' with value 1. Below these is a red 'FAIL' button. At the bottom, a 'Download Data' button is present. A table of results is displayed, showing columns for plate_name, sequence_name, sequence.coa, well_row, well_col, sequence.order, and is_match. The table contains 10 rows of data. Callouts with numbered steps point to various UI elements: Step 1 points to the 'Checker' tab; Step 2 points to the 'Upload CoA File' section; Step 3 points to the 'Upload Order File' section; Step 4 points to the 'Check' button; Step 5 points to the 'Download Data' button. Additional callouts on the right side point to the summary boxes and the results table, explaining the data shown.

Number of sequences found in the CoA file

Number of sequences found in the Order file

Number of sequence matches between the CoA and Order File

Table used to make match and Pass/Fail call

	plate_name	sequence_name	sequence.coa	well_row	well_col	sequence.order	is_match
1	VDJ3000589409	SCS' Lot 4 _A_8_H12	/5Phos/CCGATCTTGACGCC	A	1		
2	VDJ3000589409	SCS' Lot 4 _A_9_A1	/5Phos/CCGATCTAAAGCAA	A	2		
3	VDJ3000589409	SCS' Lot 4 _A_9_A2	/5Phos/CCGATCTTGAGGCC	A	3		
4	VDJ3000589409	SCS' Lot 4 _A_9_A3	/5Phos/CCGATCTATTGGAC	A	4		
5	VDJ3000589409	SCS' Lot 4 _A_9_A4	/5Phos/CCGATCTCGATGTA	A	5		
6	VDJ3000589409	SCS' Lot 4 _A_9_A5	/5Phos/CCGATCTGATCAGT	A	6		
7	VDJ3000589409	SCS' Lot 4 _A_9_A6	/5Phos/CCGATCTGTTCTG	A	7		
8	VDJ3000589409	SCS' Lot 4 _A_9_A7	/5Phos/CCGATCTTGAGCAT	A	8		
9	VDJ3000589409	SCS' Lot 4 _A_9_A8	/5Phos/CCGATCTTGCCGT	A	9		
10	VDJ3000589409	SCS' Lot 4 _A_9_A9	/5Phos/CCGATCTATGCGAT	A	10		

Showing 1 to 10 of 3,839 entries

Previous 1 2 3 4 5 ... 384 Next

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7. If anything fails, a pop message should give more information about the cause of error

Assumptions

There are a few assumptions that are made within the code. These are explained in detail below

1. Input
 - The input CoA file is a CSV file
 - The input Order file is an XLSX file in the standard IDT order form format is expected
 - Both the files at minimum should contain columns that have "plate name", "well position", "sequence name", "sequence", "concentration", and "volume"
 - Sequences in the CoA file will be checked to see if they match with those present in the order file. So, Order file should contain "all" the relevant plates information of the CoA being checked
 - Order file can contain additional sequences not within the CoA file
2. Checks Done
 - Outputs number of sequences in both files
 - Outputs number of matches of sequences

- Checks if the "plate_name", "well_position", "sequence_name" and "sequence" in both files match with one another
- Outputs Pass only if all sequences, on the same plate and at the same well position, match with each other.
- Outputs Pass only if the volumes of the sequences in the CoA are the same or more than at most 20uL than the order file.
- Outputs Pass only if the concentration of sequences in the order file is within +- 20% of the concentration in the order file.

Cleaning CoA File

Sometimes, the vendor sends a combined CoA file, for many plates/orders in one file. This cleaning utility was added to the app to make this cleaning easier. And not rely on the manual cut-paste operations.

1. Select "Clean CoA File" tab in the left side panel.
2. Upload the raw CoA File.
3. The selection box labeled "Choose columns to Filter By" should be populated by the column names in the raw CoA file.
4. Choose a column name to filter by.
5. The selection box labeled "Choose values to Filter" should be populated by the unique values in the above selected columns.
6. Choose the appropriate value to filter by.
7. Click on "Add to Filter". The text box on the top right should show the filters selected.
8. Repeat this as many times as needed.
9. Click on "View Filtered Data" to display the filtered data on the right.
10. Click on "Download Clean File" to download the clean CoA file containing only the filtered data.

The screenshot shows the IDT CoA Checker application interface. The left sidebar contains a 'Checker' section with 'Create CoA File' and 'Create Order File' options. The main area is divided into several sections: 'Upload Raw CoA File' with a 'Browse...' button and a file named 'raw_coa_file.cs'; 'Choose columns to Filter By' with a dropdown menu showing 'Plate Name'; 'Choose values to Filter' with a dropdown menu showing 'VDJ3000589409'; and a 'Filters Applied' section showing 'Sales Order # == 17656858' and 'Plate Name == VDJ3000589409'. Below these are buttons for 'Add to Filter', 'View Filtered Data', and 'Download Clean File'. The 'Filtered Data' section shows a table with columns: Plate Name, Payment Method, Plate Barcode, Sales Order #, Reference #, Well Position, and Sequence Name. The table contains three rows of data. Callouts provide step-by-step instructions: Step 1: Select 'Create CoA File'; Step 2: Upload the raw CoA File; Step 3: Choose column to filter by; Step 4: Choose value in column to filter by; Step 5: Click add to filter. Multiple filters can be applied; Step 6: Click to check if data makes sense; Step 7: Download clean coa file. Additional callouts state: 'After you click "Add to filter" this list should start showing you what all filters you have applied' and 'Table shows the data after all the above listed filters have been applied'.

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Cleaning Order File

Coming soon