

## BAX® SalQuant® – Using BAX® System Q7 Software v5.1 with SureTrend®

### Scope

This document outlines an improved procedure for performing PCR on the BAX® System Q7 and generating quantification results in SureTrend® for samples processed according to BAX System SalQuant® protocols. The new procedure is intended to replace the reliance on Microsoft Excel spreadsheets for quantification results. The updated process introduces a more streamlined, efficient, and scalable system that improves data accuracy and reduces the risk of manual errors.

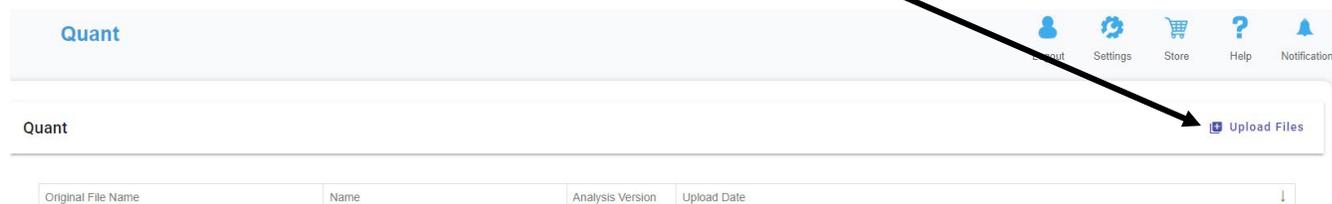
### Procedure

#### 1. Run PCR in the BAX System Q7 software v5.1 using the 'SalQuant' target

- 1.1 Prior to running PCR on the BAX System Q7 instrument, ensure that the appropriate protocols and quantification time points were followed for the sample matrix as defined in the [Quantification and Limits Manual](#).
- 1.2 Select 'SalQuant' as the target from the target selection dropdown menu. If the target is not available, it can be added to the target selection menu:
  - 1.2.1 Navigate to 'View' in the menu taskbar. Click 'Select Targets...' to display the Define Target Selection Window.
  - 1.2.2 To add to the list of targets available for selection, click on 'SalQuant' from the list on the left to highlight it, and click the arrow button to move the selection to the list on the right. The 'SalQuant' option should now be listed in the 'Targets available for selection' list.
  - 1.2.3 Click 'OK' and the dialogue box will close.
- 1.3 Initialize the instrument and run the program. Follow the screen prompts to load your samples. Refer to the BAX System Q7 User Guide for detailed instructions.

#### 2. Upload .bax files to SureTrend to get quantification results

- 2.1 Log in to your SureTrend account.
- 2.2 Navigate to the Quant module by clicking the 'Quant' tab on the left-hand side of the screen.
- 2.3 Click the 'Upload Files' button on the right-hand side of the screen.





- 2.4 In the PCR Data Upload screen, choose the appropriate site in the 'Select Site' dropdown, and select the 'Bax (.bax)' option in the 'File Type' dropdown if it's not already selected.
- 2.6 Click the 'Select file(s) to upload' button, then select the files from your computer.
- 2.7 Click the 'Upload' button, and the file will be uploaded into SureTrend.

### 3. Analyze files for Quant results

3.1 Navigate to the Quant module by selecting the 'Quant' tab on the left-hand side of the screen. Find the file of interest and click on the file name.

3.1.1. Refer to the Appendix for alternative pathways to the rack view.

3.2 In the 96-well rack view, click on a well (or a set of wells), and first select whether the sample(s) is a poultry, beef, pork, environmental or laboratory sample. Then, select the appropriate matrix within the sample category

3.2.1 The 'Select / Unselect All' button is another selection tool, depending on how many samples in the rack need to be selected and analyzed

3.2.2 Different matrices can be selected within the same rack

Quantification Matrix Selection

- ▶ Laboratory
- ▶ Poultry
- ▶ Beef
- ▶ Pork
- ▶ Environmental

Quantification Matrix Selection

- ▶ Laboratory
- ▼ Poultry
 

Name	Time Point	Report Unit Per Sample	Report Unit	Limit Of Quantification
Rinsate	6	LogCFU/Carcass	LogCFU/mL	1 CFU/mL
Rinsate (Low Level)	10	LogCFU/Carcass	LogCFU/mL	0.5 CFU/30 mL Sample
Ground Chicken 1:4	8	LogCFU/325g	LogCFU/g	1 CFU/g
Ground Chicken 1:6	8	LogCFU/325g	LogCFU/g	1 CFU/g
Ground Turkey 1:1	8	LogCFU/325g	LogCFU/g	1 CFU/g
Ground Turkey 1:4	8	LogCFU/325g	LogCFU/g	1 CFU/g
Ground Turkey 1:6	8	LogCFU/325g	LogCFU/g	1 CFU/g
Boot Swab	10	LogCFU/Boot swab	LogCFU/mL	1 CFU/mL
Feed	8	LogCFU/25g	LogCFU/g	10 CFU/g
Ceca	10	LogCFU/Ceca	LogCFU/mL	10 CFU/mL

3.3 Click the 'Analyze' button:

Quant												Custom_Rack_0_bax												Select/Unselect All	Analyze
	1 - 0.5_B2		9 - 3.0_B1		17 - 0.0_B1		25 - B1_1.0		33 - 10 CFU_4		41 - 1.0_B1		49		57		65		73		81		89		
	2 - 0.5_B2		10 - 0.0_B1		18 - 2.0_B1		26 - B2_1.0		34 - 0.0_B1_3z		42 - 2.0_B1		50		58		66		74		82		90		
	3 - 0.5_B2		11 - 0.0_B3 Ground Beef		19 - 1		27 - B2_1.0		35 - 0.0_B1_3z		43		51		59		67		75		83		91		
	4 - B1_0.0 Rinsate		12 - 2.0_B1 Ground Beef		20 - 3		28 - 1.0_B1		36 - 2.0_B1_3z		44		52		60		68		76		84		92		
	5 - B1_0.0		13 - 1 CFU_1		21 - 7		29 - 1.0_B1		37 - B1_0.0		45		53		61		69		77		85		93		
	6 - B2_0.0 Ground Beef		14 - 1 CFU_2 Rinsate		22 - 0.0_B1		30 - 1.0_B1		38 - B1_0.0		46		54		62		70		78		86		94		
	7 - 0.0_B1		15 - 100 CFU_1 Rinsate		23 - 0.0_B2		31 - 10 CFU_4		39 - B2_1.0		47		55		63		71		79		87		95		
	8 - 1.0_B1		16 - 0.0_B1		24 - 2.0_B1		32 - 10 CFU_4		40 - 0.0_B2		48		56		64		72		80		88		96		

4. Review results and export data

4.1 After clicking the 'Analyze' button, scroll down to view results in a table format.

4.1.1 To change which columns are displayed, click the 'Column Chooser' icon located at the top right of the results table. The selections are preserved until changes are made.

<input checked="" type="checkbox"/>	▼	CT	Well	Sample Id	▼	PCR Kit	▼	Lot Number	▼	Matrix	▼	Timepoint	▼	Estimated ...	▼	Estimated ...	▼	CFU Per S...	▼	CFU Per U...	▼	Matrix Ver...	▼	Limit of Qu...
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4.2 To export the data:

4.2.1 Into an Excel report (.xlsx), click the 'xlsx' icon located at the top right of the results table:



4.2.2 Into a PDF report (.pdf), click the 'Printer' icon located at the top right of the results table:



4.2.3 The export includes the columns selected and displayed in SureTrend.

4.3 Refer to these [instructions](#) for guidance on interpreting the results from SureTrend.

4.3.1 Note that each method has a limit of quantification (LOQ) and an enumerable range. For results below the LOQ, Hygiena recommends reporting results as 'Below LOQ' or '<LOQ'. For results above the enumerable range, Hygiena recommends reporting results as "Greater than enumerable range' or 'TNTC'.

## Frequently Asked Questions (FAQs)

**Can I upload a file into SureTrend that was analyzed in a version of BAX Q7 software other than v5.1?**

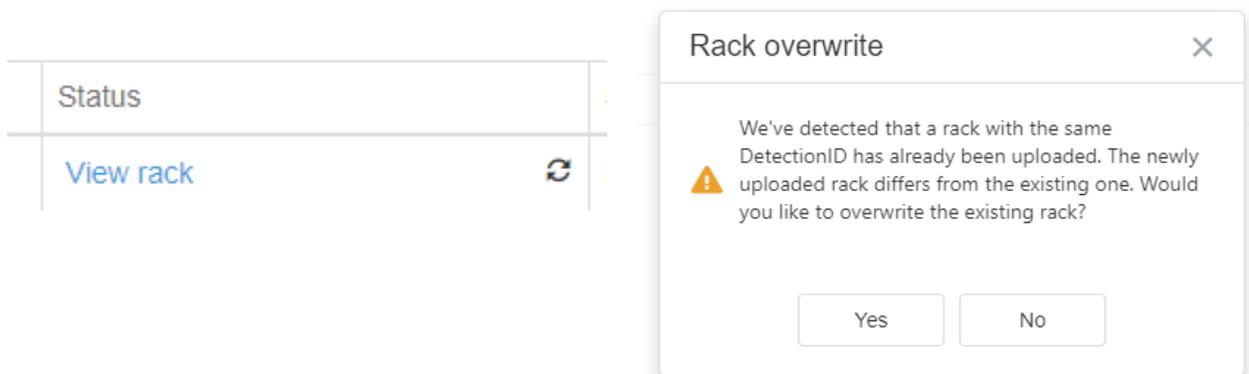
Yes, the file can be uploaded. However, for accurate quantification results, the SalQuant assay target and software v5.1 must be used.

**What happens if I upload a file into SureTrend that was analyzed using the 'Real Time Salmonella' target?**

The file can be uploaded but the SalQuant assay target and software v5.1 must be used for accurate quantification results.

**Can I reupload a .bax file that I previously analyzed using the wrong target selection?**

Yes. Upon uploading a reanalyzed file, SureTrend will detect and note that the data has already been uploaded. This is indicated by the “reuse” icon next to ‘View rack’ in the Status column. If the site admin/owner clicks on the icon, a rack overwrite message will appear, asking for confirmation to overwrite the existing rack. Previous data is maintained for audit traceability.



**The matrix I am running is not available in SureTrend. How does it get added?**

Please contact your Hygiena representative or Hygiena Technical Support at [techsupport@hygiena.com](mailto:techsupport@hygiena.com) or from our website [www.hygiena.com/support](http://www.hygiena.com/support).

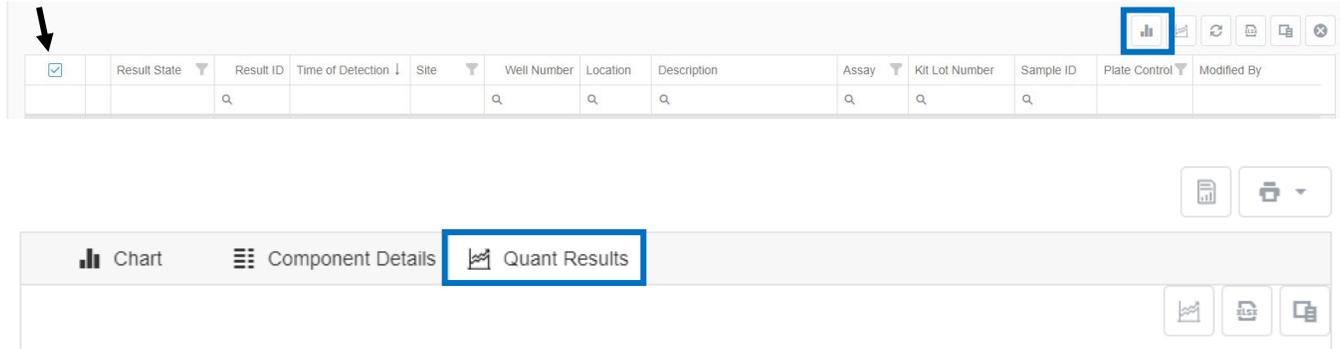
**I would like the quantification results to be exported to my LIMS. How can I set that up?**

Connection to LIMS requires API integration. Consult your Hygiena representative to set up API integration.



**How do I review or retrieve results that I previously analyzed in the Quant module?**

First, navigate to the Results tab. Select the well(s) you want to review. Alternatively, the results can be grouped by file names by adjusting the 'Rack View' toggle button. From this view, you can select individual wells by checking the box next to the individual sample or select the entire file by clicking the checkbox at the top. Once the selection is made, click the bar graph icon to 'Plot well curves'. In the next screen, click the tab 'Quant Results' to review the results.



**Can I auto-sync uploads from my Q7 into SureTrend for SalQuant analysis?**

Yes, an internet connection is required on the BAX System Q7 to enable auto-sync uploads. The simplest way is to set auto-sync as available to SureTrend from the desktop BAX System Q7 software, find the quant rack from the 'Quant' tab in SureTrend, and go into matrix definition.

**Can I run the SalQuant assay at the same time as the BAX System Real-Time *Salmonella* on the same rack on the Q7?**

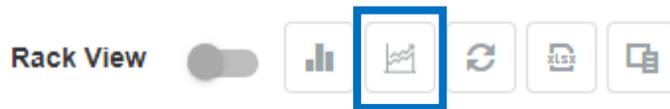
The SalQuant assay target is compatible with BAX System Real-Time *Salmonella*, BAX System Real-Time Genus *Listeria*, and BAX System Real-Time *Listeria monocytogenes* assays. They can all be run together in the same .bax file.

## Appendix

### Alternative ways to navigate to the 96-well rack view in the Quant module

Any of these three paths will bring the user to the 96-well display rack view within Quant. From the rack view, well(s) and desired matrix can be selected for Quant analysis.

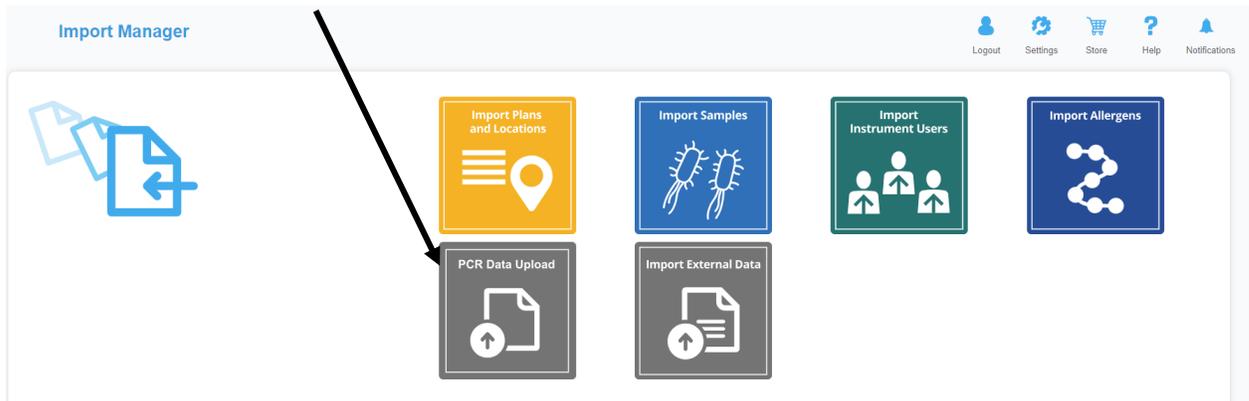
1. Through the Quant tab:
  - Find the file of interest and click on the file name.
2. Through the Results tab:
  - Make sure the time range is appropriate for the data you're interested in
  - Select a well from the file/rack you are interested in analyzing by checking the check box next to the well
  - Once the check box is selected, click the Quant Results icon:



3. Through the PCR Data Upload screen:
  - Navigate to Home, and click on the 'Import Data' icon in the Quick Access Links section:



- In the Import Manager screen, click on the 'PCR Data Upload' icon.





- In the PCR Data Upload screen, click the 'View rack' link in the Status column for the file of interest.
- Select box asking, 'Is this Quant Upload?'

**PCR Data Upload**

Select Site

File Type

Is this Quant upload?

Is this environmental data?

- Allowed file extensions: .bax, .zip
- Maximum file size: 28.61 MB
- If you have multiple files in a zip archive you can upload them here.

Select file(s) to upload