

MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0

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This document contains basic information that is required to use the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer. For more information, see the *MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0 User Guide* (Pub. No. MAN0019554).

Product description

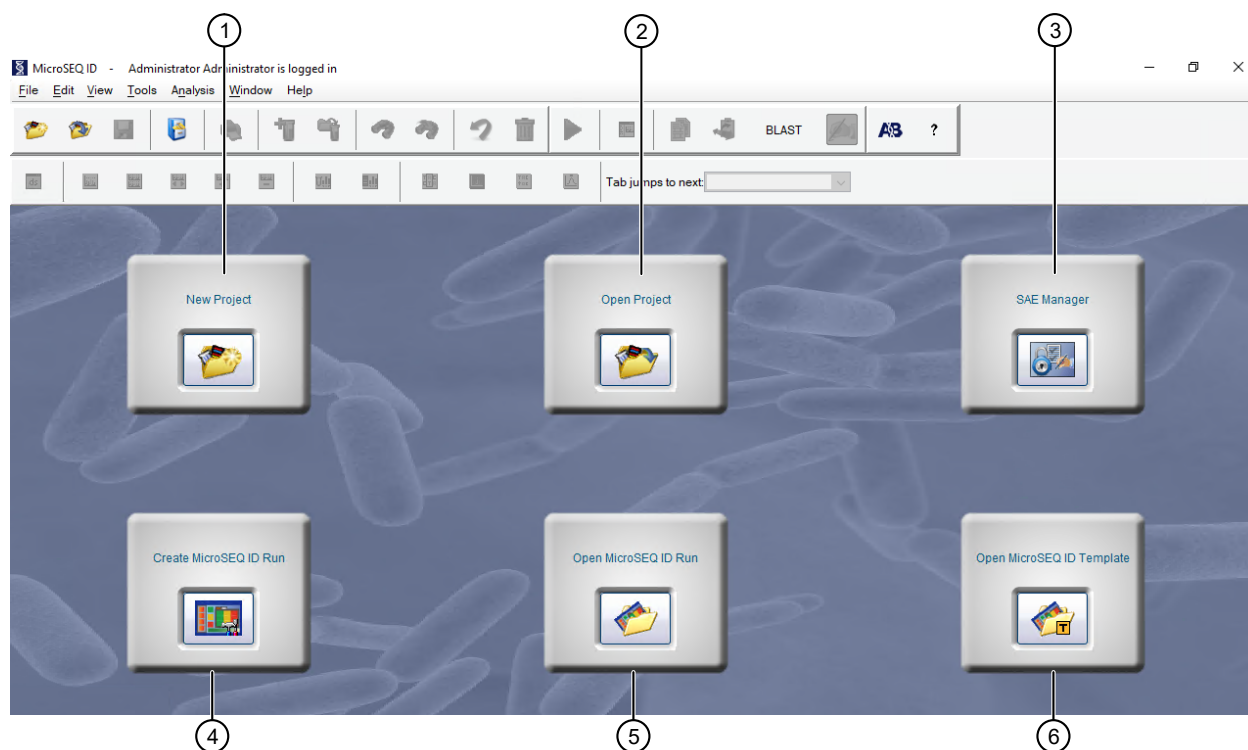
The Applied Biosystems™ MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0 is part of a streamlined workflow for microbial identification of bacteria and fungi. MicroSEQ™ chemistry kits are used to generate PCR products that are sequenced on a SeqStudio™ Genetic Analyzer. The MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0 compares the sequencing data to validated microbial libraries and generates an identification report with percent similarity. The report includes a final identification list of the organisms that closely match the unknown sample and can generate a phylogenetic tree. Security, audit, and e-signature capabilities are included to help enable 21 CFR Part 11 compliance.

Sign in to the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer

To log in to the software:

1. Start the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer by double-clicking the MicroSEQ ID icon  on the desktop.
2. Enter your user name and password, then click **OK**.

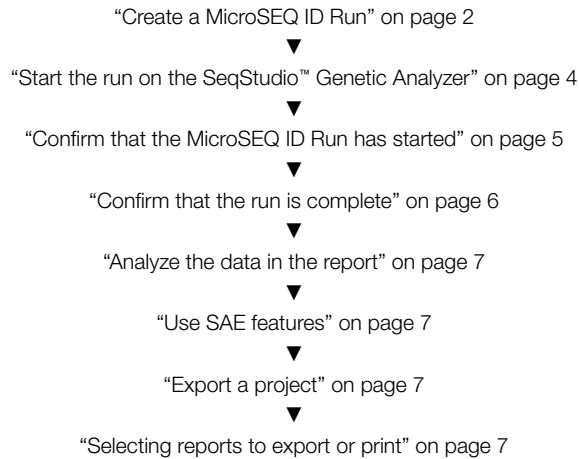
Home screen



- ① New Project
- ② Open Project
- ③ SAE Manager

- ④ Create MicroSEQ ID Run
- ⑤ Open MicroSEQ ID Run
- ⑥ Open MicroSEQ ID Template

Workflow



Create a MicroSEQ ID Run

1. On the home screen, click **Create MicroSEQ ID Run**.
The **MicroSEQ ID Run** window opens.

MicroSEQ ID Run - DocDemo1

MicroSEQ ID Run Name: DocDemo1

Run Module: MediumSeq

Project Analysis Report: AB Standard Report

Matches To Display: 7

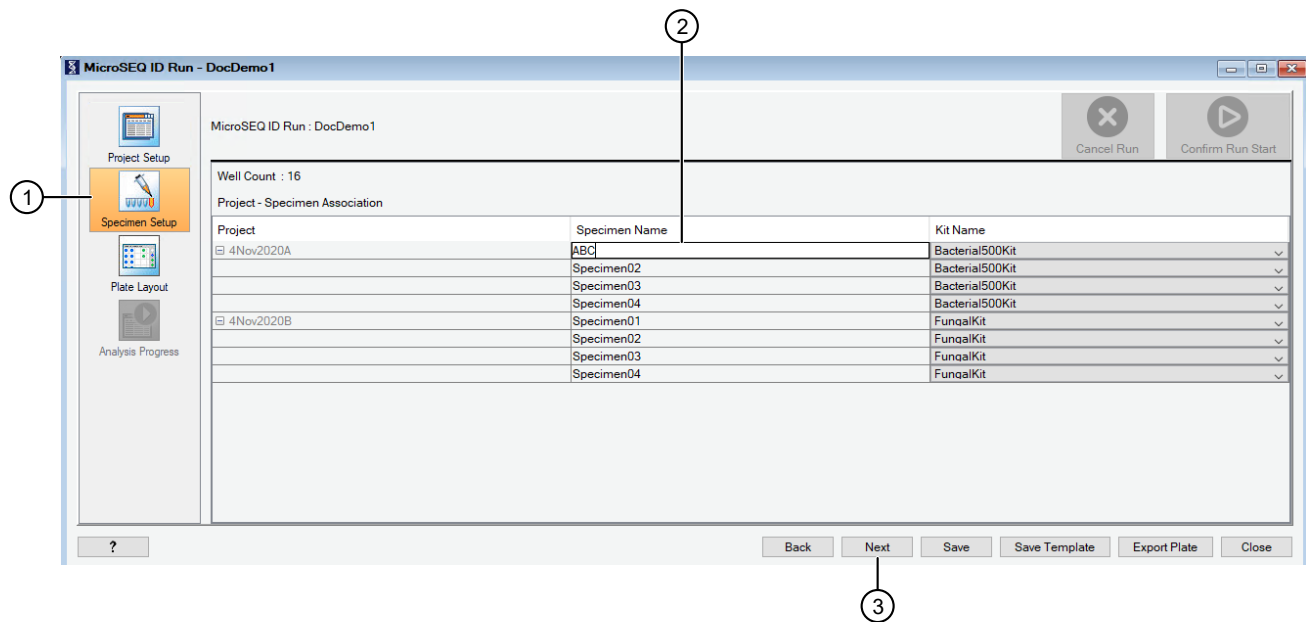
Add Projects in the order they will be mapped on plates
Changing the Kit name has reset the list of selected libraries

#	New Project Name	# of Specimens	Kit	Project Analysis Protocol	Libraries
1	4Nov2020A	4	Bacterial500Kit	AB KB 3200 SeqStudio POP1 BDTv1	MicroSEQ_ID_16S_rDNA_500_Library_v20...
2	4Nov2020B	4	FungalKit	AB KB 3200 SeqStudio POP1 BDTv1	MicroSEQ_ID_Fungal_Library_v2018

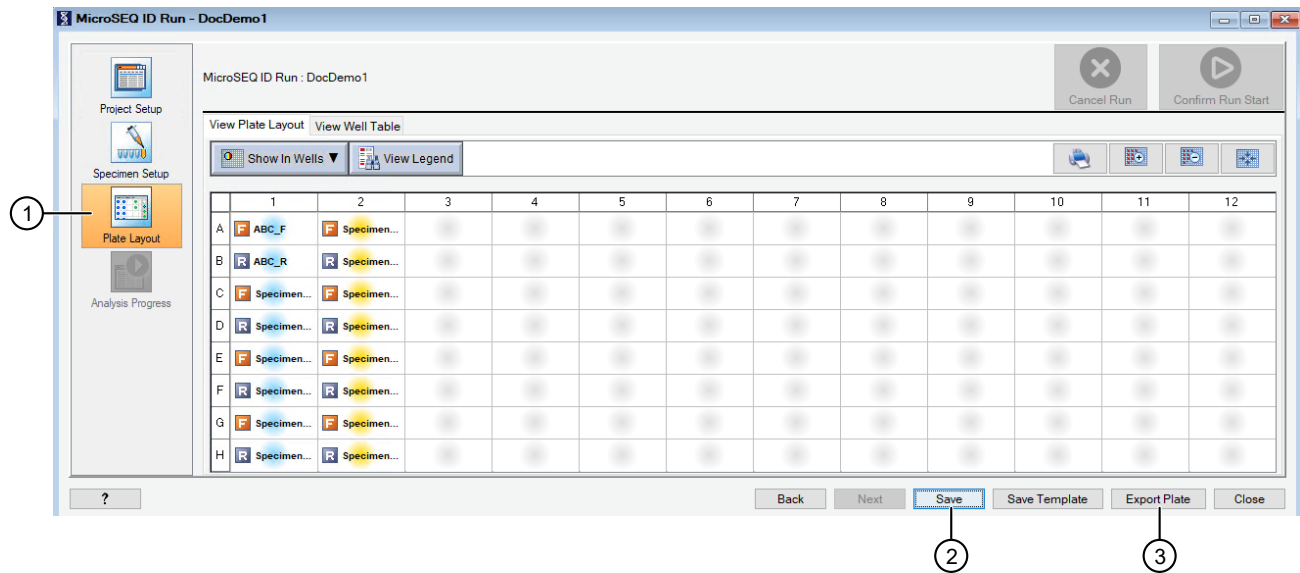
Back Next Save Save Template Export Plate Close

- ① Project Setup
2. Enter the **Project Setup** details.
 - a. Enter the **MicroSEQ ID Run Name**.
 - b. Select the **Run Module**.
 - c. Select the **Project Analysis Report**.
 - d. Select the number of **Matches To Display**.
3. Click **Add Project**, then enter the project details.
 - a. Enter the **New Project Name**.
 - b. Enter the **# of Specimens**.
 - c. Select the **Kit**.
 - d. Select the **Project Analysis Protocol**.
 - e. Select the **Library**.
4. Click **Next**.
The **Specimen Setup** pane opens.

5. (Optional) Edit the specimen names as required.



- ① Specimen Setup
 - ② Specimen Name textbox
6. Click **Next**.



- ① Plate Layout
 - ② Save button
 - ③ Export Plate button
- The **Plate Layout** pane opens.
7. Click **Save** to save the run.
8. Click **Export Plate**.
- A confirmation is received if the plate is exported successfully.

Start the run on the SeqStudio™ Genetic Analyzer

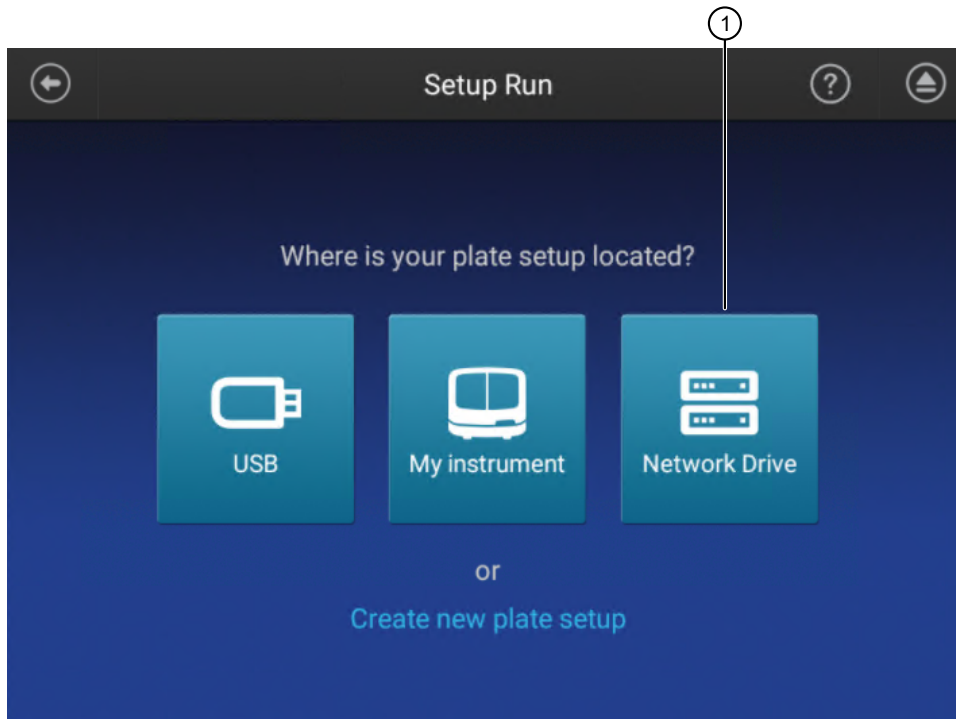
The plate must be exported from the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0 before starting the run on the SeqStudio™ Genetic Analyzer.

The network location must be established by the **Administrator** prior to running plates on the SeqStudio™ Genetic Analyzer. This location is used to store imported plates and instrument AB1 files.

If SAE is enabled on the SeqStudio™ Genetic Analyzer (Recommended), the user must be signed in.

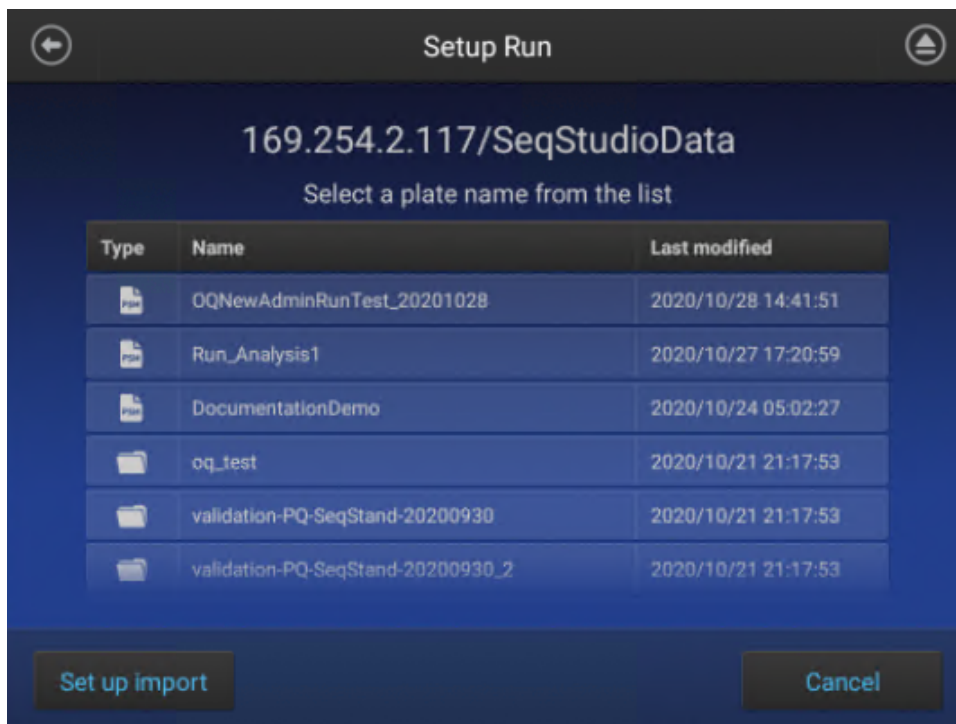
Some SeqStudio™ Genetic Analyzer features (for example, remote monitoring) are disabled when using the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0.

1. Load the plate into the instrument.
2. Import the plate from the network drive to the SeqStudio™ Genetic Analyzer.
 - a. In the SeqStudio™ Genetic Analyzer home screen, touch **Setup run**, then select **Network Drive** to import the plate exported from the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0.



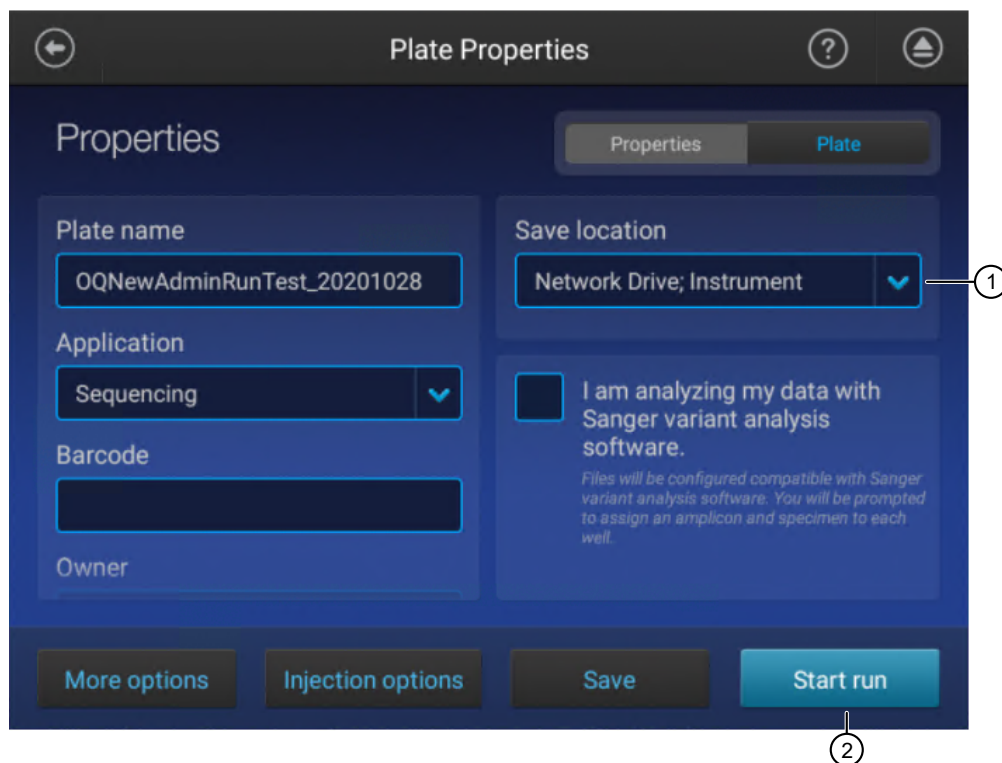
① Network Drive

- b. Select the plate from the network drive.



- c. Select the **Network Drive** (established by the **Administrator**) in the **Save location** drop-down list.

d. Verify that all **Plate Properties** are correct.



The 'Plate Properties' dialog box is shown with the 'Plate' tab selected. It contains the following fields and controls:

- Plate name:** OQNewAdminRunTest_20201028
- Application:** Sequencing (dropdown menu)
- Barcode:** (empty text field)
- Owner:** (empty text field)
- Save location:** Network Drive; Instrument (dropdown menu, circled with 1)
- Checkboxes:** ☐ I am analyzing my data with Sanger variant analysis software. (Below this is a note: "Files will be configured compatible with Sanger variant analysis software. You will be prompted to assign an amplicon and specimen to each well.")
- Buttons at the bottom:** More options, Injection options, Save, and Start run (circled with 2)

① Save location

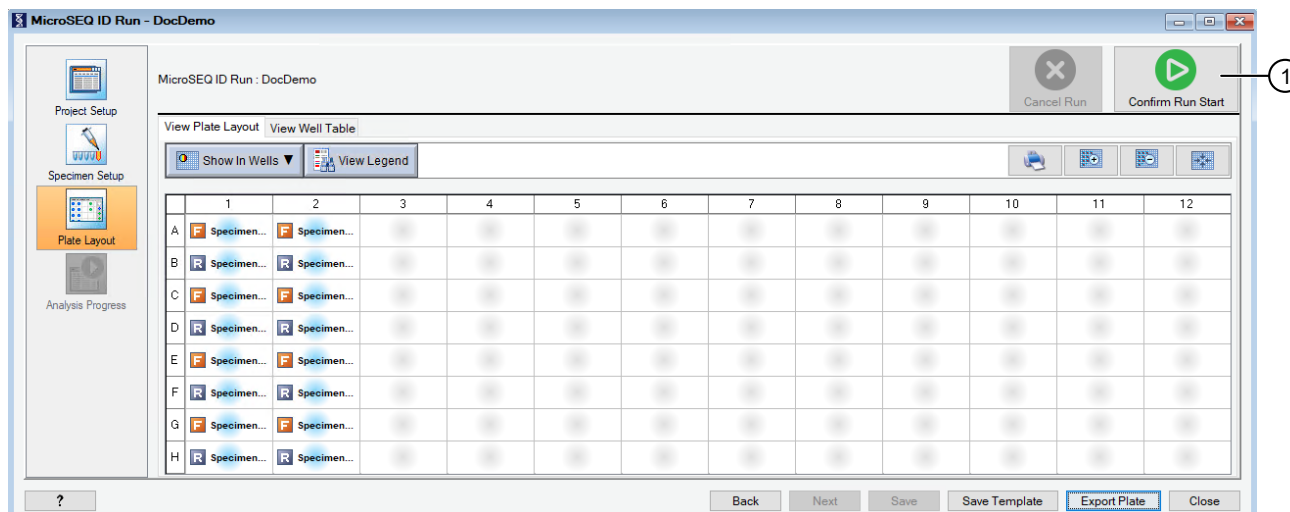
② Start run

3. Touch **Start Run**.

Confirm that the MicroSEQ ID Run has started

Ensure that the run has started on the SeqStudio™ Genetic Analyzer.

Return to the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer and click **Confirm Run Start**.



The 'MicroSEQ ID Run - DocDemo' software interface is shown. It features a sidebar on the left with icons for Project Setup, Specimen Setup, Plate Layout (highlighted), and Analysis Progress. The main area displays a 'View Plate Layout' table with columns 1-12 and rows A-H. Each cell contains a specimen name and a status icon. At the top right, there are 'Cancel Run' and 'Confirm Run Start' buttons, with the latter circled with 1. At the bottom, there are buttons for Back, Next, Save, Save Template, Export Plate, and Close.

① Confirm Run Start button

A confirmation is received if the run was started successfully. The files are auto-imported into the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0 when the run is complete.

Confirm that the run is complete

When the run is complete on the SeqStudio™ Genetic Analyzer, return to the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0, then click **Confirm Run Complete**. All specimen data from the genetic analyzer are mapped in the software and the boxes in the **Result Available** column turn green.

Note: Mapping can only be completed once the run is finished on the SeqStudio™ Genetic Analyzer.

If any specimens were not mapped automatically, see the troubleshooting section of the *MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0 User Guide* (Pub. No. MAN0019554).

MicroSEQ ID Run - DocDemo

Project and Specimen Monitor

Project	Result Available	Action
2Nov2020	0%	Open Report
Specimen01		View Specimen
Specimen02		View Specimen
Specimen03		View Specimen
Specimen04		View Specimen
Specimen05		View Specimen
Specimen06		View Specimen
Specimen07		View Specimen
Specimen08		View Specimen

Sample Monitor

	1	2	3	4	5	6	7	8	9	10	11	12
A												
B												
C												
D												
E												
F												
G												
H												

Legend:
■ - Analyzed ■ - Analyzing/ Not Started ■ - Not Analyzed
■ - Mapping Completed ■ - Mapping In Progress/ Not Started ■ - Not Mapped

Buttons: Back, Next, Save, Save Template, Export Plate, Close

① Analysis Progress

② List of imported specimens

③ Open Report

④ Confirm Run Complete button

When specimen data is mapped successfully, the hyperlinks in the **Action** column turn blue and can be opened.

MicroSEQ ID Run : validation-PQ-SeqStand-20200930

Project and Specimen Monitor

Project	Result Available	Action
PSV-PQ-SeqStd	100%	Open Report
Standard01		View Specimen
Standard02		View Specimen
Standard03		View Specimen
Standard04		View Specimen

Sample Monitor

	1	2	3	4	5	6	7	8	9	10	11	12
A												
B												
C												
D												
E												
F												
G												
H												

Legend:
■ - Analyzed ■ - Analyzing/ Not Started ■ - Not Analyzed
■ - Mapping Completed ■ - Mapping In Progress/ Not Started ■ - Not Mapped

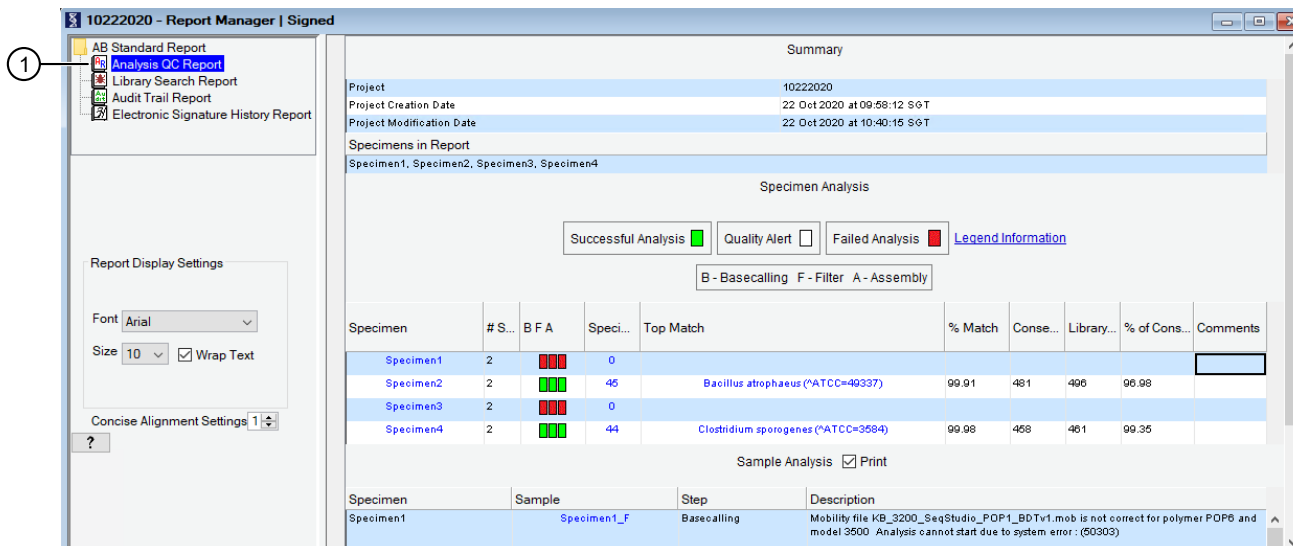
Buttons: Back, Next, Save, Save Template, Export Plate, Close

① Result Available column

② Action column

Analyze the data in the report

1. Click **Open Report** for the **Project** of interest.
The **Analysis QC Report** opens.



- ① Analysis QC Report
2. In the **Analysis QC Report** check the following parameters.
 - a. Check the **Basecalling**, **Filter**, and **Assembly** columns for warnings and failures.
 - b. Check the values displayed in the **Specimen Score** column.
 - c. Check the values displayed in the **% Match** column.
 - d. Check the **Consensus** and **Library Entry Length**.
 - e. (Optional) Add comments to the **Comments** field.
3. Review the **Library Search Report**, **Audit Trail Report**, and **Electronic Signature Library Report** as required.

Use SAE features

Only the **Administrator** can enable the **Authentication**, **Electronic Signature** and **Audit Trail** features as required for each user and for specific events. If SAE is enabled, dialog boxes appear at key steps in the process. For more information about SAE features, see the *MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer v1.0 User Guide* (Pub. No. MAN0019554).

To open the **Electronic Signature™ Verification** dialog box and to e-sign:

- Perform an event that prompts an **Electronic Signature™ Verification** dialog box.
- or
- Select a project, specimen or sample in the Project navigator pane, then select **Tools ► Electronic Signature™ ► Sign** to open the **Electronic Signature™ Verification** dialog box.

To e-sign, enter the username and password in the **Electronic Signature™ Verification** dialog box, then click **OK**.

Export a project

1. Close the project.
2. Select **Tools ► MicroSeqID Manager**, then select the **Projects** tab.
3. Select the project(s) to be exported, then click **Export**.
4. Browse to your designated folder.
5. Click **Export**, then **Close**.

Selecting reports to export or print

View the report

1. In the Project window, select **Analysis ► Report Manager**.
2. To change to a different Project Analysis Report (AB™ Standard vs. a custom report):
 - a. Right-click on the project name and select **Properties and Settings**.
 - b. In the Project Analysis Report drop-down list, select the desired report.
 - c. Click **OK**.
 - d. Select **Analysis ► Report Manager**.

Export the report

1. Select the report in the **Report Manager** navigation pane. Reports can be exported in HTML, PDF, XML, or TXT formats.
2. Select **File ► Export ► Report**.
3. Navigate to and select the desired destination folder, then click **Export**.

Print the report

1. Select **File ▶ Print**.
2. Select the desired print settings.
3. Click **Print ▶ OK**.



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For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

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Revision history: Pub. No. MAN0019555

Revision	Date	Description
A.0	11 November 2020	New document for the MicroSEQ™ ID Software For SeqStudio™ Genetic Analyzer.

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