

GENERATING A DEVYSER LB-A SAMPLE SHEET WITH ILLUMINA IEM

Generate a sample sheet for each run by using the valid version of the Illumina Experiment Manager (IEM) software according to the Illumina document # 15031335: "Illumina Experiment Manager Software Guide"¹. The IEM software is installed on the MiSeq computer and can also be downloaded from the Illumina website and installed on other computers.

Update service

Sign up for the handbook update service to receive notifications via e-mail whenever there is a new version available.
Visit www.devyser.com/ifu-subscription to sign up.

1. IEM FILES IMPORT

The following information applies to IEM version 1.15 and older.
Download the zip-bundle "LB-A_IEM_files vYYYY-MM-DD" from the Devyser website. Locate the Illumina folder on the MiSeq computer or on another computer. It can usually be found under C:\Program Files (x86), alternatively under C:\Program Files. Then add the files listed below in the destination folder indicated for each file.

■ DEVYSER Index LB-A MiSeq.txt

Into: Illumina\Illumina Experiment Manager\SamplePrepKits

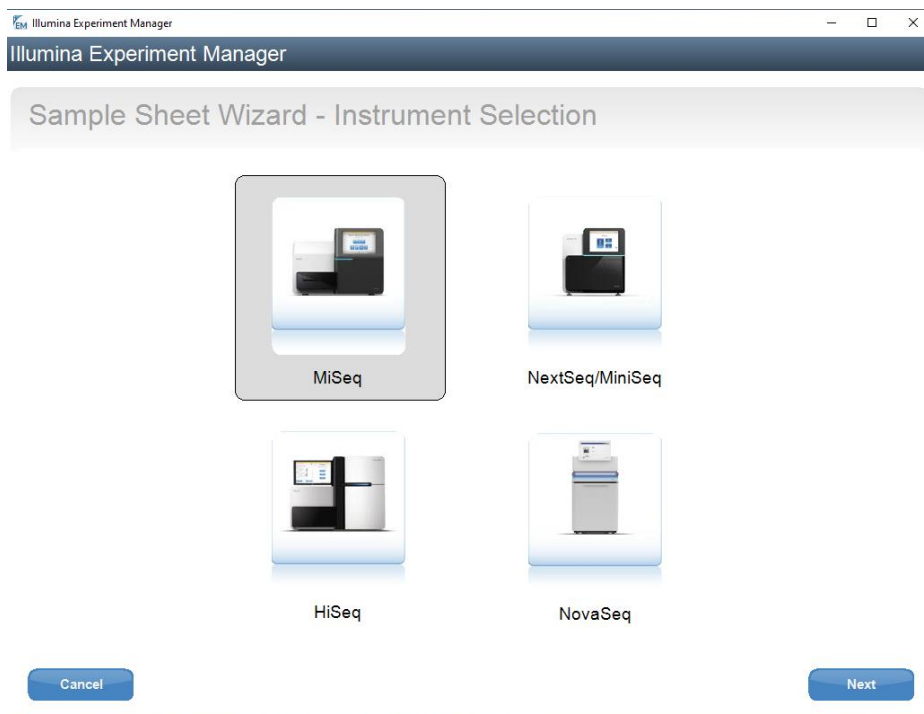
■ DevyserGenerateFASTQ - LB.txt

Into: Illumina\Illumina Experiment Manager\Applications

Note. Before updating the IEM software, uninstall any previous version. Then manually delete all the Devyser files that are still present in the folders listed above. Finally, install the updated version of the IEM software.

2. USING ILLUMINA EXPERIMENT MANAGER WITH DEVYSER INDEX PLATE LB-A

1. Select “Create Sample Sheet”, then “MiSeq” and press “Next”



2. Select “Other” and “Devyser FASTQ Only - LB” and press “Next”

Illumina Experiment Manager

Sample Sheet Wizard - MiSeq Application Selection

Select Category

- Targeted Resequencing
- Small Genome Sequencing
- RNA Sequencing
- Other**

Select Application

- TruSight HLA
- Library QC
- FASTQ Only
- DEVYSER FASTQ Only
- DEVYSER FASTQ Only - LB**
- ChIP-Seq

Cancel Back Next

3. Enter “76” in “Cycle read 1” and “Cycle read 2” and enter the additional information prompted by software wizard (names etc.). Press “Next”.

EM Illumina Experiment Manager

Illumina Experiment Manager

Sample Sheet Wizard - Workflow Parameters

DEVYSER FASTQ Only - LB Run Settings

Reagent Cartridge Barcode*

Library Prep Workflow DEVYSER Index LB-A

Index Adapters DEVYSER Index LB-A

Index Reads ☐ 0 (None) ☐ 1 (Single) ☒ 2 (Dual)

Experiment Name

Investigator Name

Description

Date 2020-10-30

Read Type ☒ Paired End ☐ Single Read

Cycles Read 1 151

Cycles Read 2 151

* - required field

DEVYSER FASTQ Only - LB Workflow-Specific Settings

☐ Custom Primer for Read 1

☐ Custom Primer for Index

☐ Custom Primer for Read 2

☐ Reverse Complement

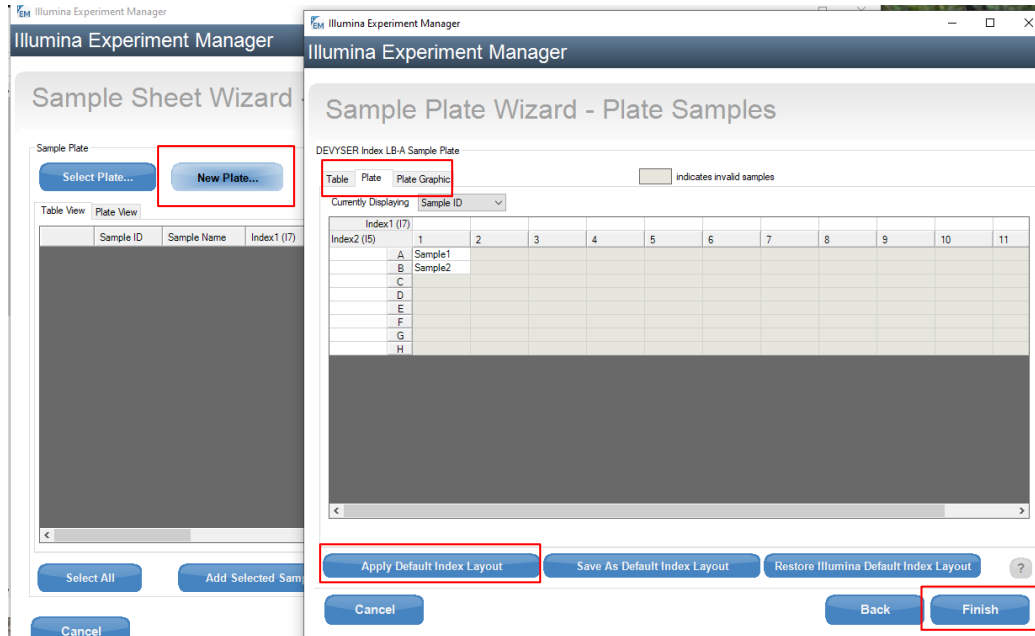
☒ Use Adapter Trimming

☒ Use Adapter Trimming Read 2

Cancel Back Next

4. Select "New Plate..." in "Sample Sheet Wizard" and name the plate.

5. In "Sample Plate Wizard" select tab "Plate" and press "Apply Default Index Layout". Enter your sample names or copy from excel (note the Illumina naming conventions) and press finish.



6. Select the samples and press “Add Selected Samples”. The samples will then be transferred to the right part of the window. Make sure that both Index1 (I7) and Index2 (I5) display identical index ID (LB001 etc.). Select “Finish” and transfer the sample sheet to your MiSeq.

Note. If only a few samples are sequenced they can be entered in the “Samples to include in sample sheet” by pressing “Add Blank Row” and selecting the index in the selection menu that appears when pressing the blank space in Index1 / Index2 column. Make sure that index 1 and index 2 have identical index ID.

3. INDEX DESCRIPTION

The Illumina double indexes introduced during PCR2 are listed in table 1 below

Table 1: Illumina double indexes used in Index plate LB-A

	1	2	3	4	5	6	7	8	9	10	11	12
A	LB001	LB009	LB017	LB025	LB033	LB041	LB049	LB057	LB065	LB073	LB081	LB089
B	LB002	LB010	LB018	LB026	LB034	LB042	LB050	LB058	LB066	LB074	LB082	LB090
C	LB003	LB011	LB019	LB027	LB035	LB043	LB051	LB059	LB067	LB075	LB083	LB091
D	LB004	LB012	LB020	LB028	LB036	LB044	LB052	LB060	LB068	LB076	LB084	LB092
E	LB005	LB013	LB021	LB029	LB037	LB045	LB053	LB061	LB069	LB077	LB085	LB093
F	LB006	LB014	LB022	LB030	LB038	LB046	LB054	LB062	LB070	LB078	LB086	LB094
G	LB007	LB015	LB023	LB031	LB039	LB047	LB055	LB063	LB071	LB079	LB087	LB095
H	LB008	LB016	LB024	LB032	LB040	LB048	LB056	LB064	LB072	LB080	LB088	LB096

4. REFERENCES

¹ Illumina Experiment Manager Software Guide (Illumina document # 15031335)

5. REVISION HISTORY

Version 2020-11-03

New