

Generating a Devyser LB-A Plate sample sheet with Illumina IEM

Generate a sample sheet for each run by using the current version of the Illumina Experiment Manager (IEM) software guide¹. The IEM software is installed on the MiSeq computer and can also be downloaded from the Illumina website and installed on other computers.

Please contact techsupport@devyser.com if the software version is incompatible.

1. Install the Devyser LB-A IEM Files

Download the zip bundle "Index Plate LB-A IEM files vYYYY-MM-DD" from the Devyser website and extract the contents.

Add the Devyser Library Prep Kit

1. Navigate to the IEM installation directory:
Illumina\Illumina Experiment Manager\SamplePrepKits
2. Copy the file **Devyser Index LB-A.txt** into the SamplePrepKits folder

Add the Devyser Application

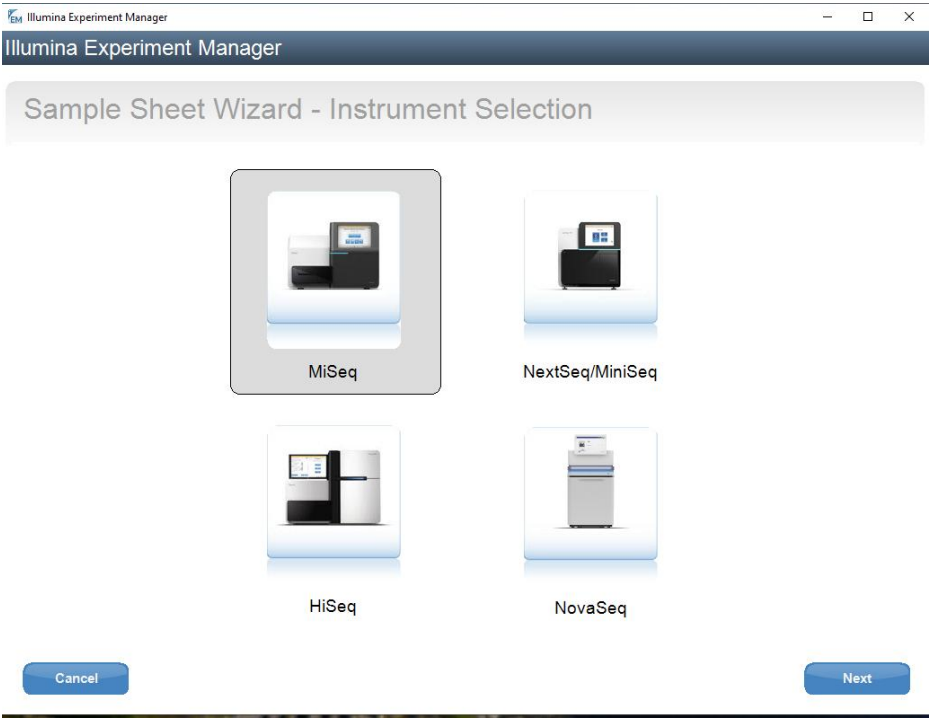
1. Navigate to the IEM installation directory:
Illumina\Illumina Experiment Manager\Applications
2. Copy the file **Devyser Generate FASTQ LB-A.txt** into the Applications folder:
3. If Illumina Experiment Manager is currently running, close and restart the application.

After restarting IEM, the Devyser application and library prep kit will be available during sample sheet creation.

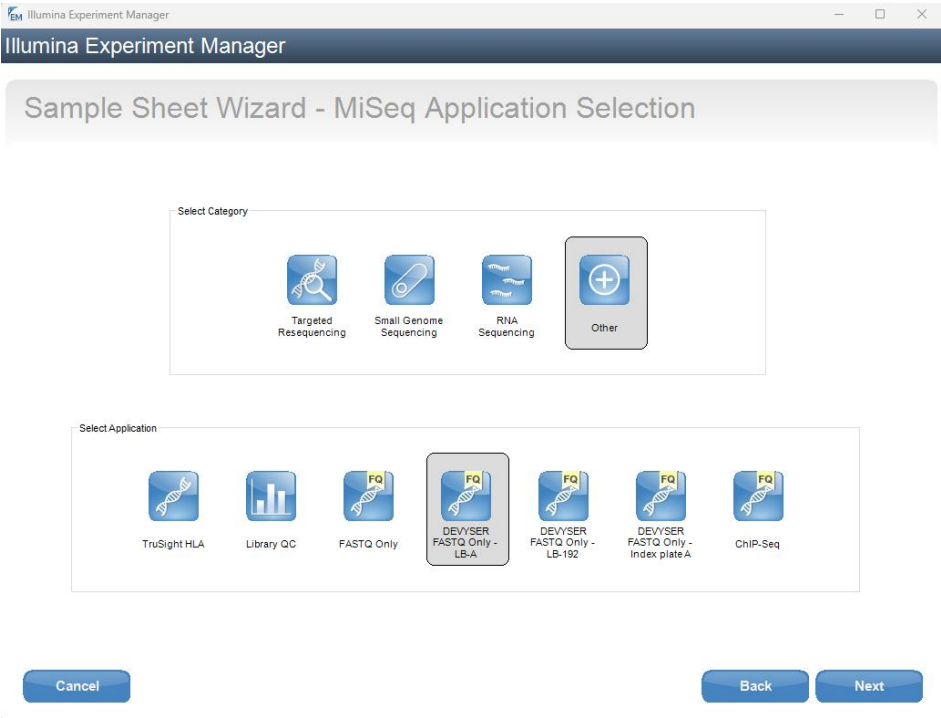
Note: When updating IEM, uninstall the previous version and remove any existing Devyser files from the folders above before installing updated Devyser files.

2. Using Illumina experiment manager with Devyser Index Plate LB-A

1. Select "Create Sample Sheet", instrument "MiSeq" and press "Next"



2. Select "Other" and "DEVYSER FASTQ Only - LB-A" and press "Next"



- Enter the sequencing settings as specified in the current Instructions for Use (IFU) or Handbook for the selected Devyser kit. Configure the run as either **2 × 76 bp paired-end**, **2 × 151 bp paired-end**, or **1 × 301 bp single-read**, as applicable.
- Complete the remaining fields requested by the software wizard and click **Next**.

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

7. 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.).
8. Select "Finish" and transfer the sample sheet to your MiSeq.

Illumina Experiment Manager

Sample Sheet Wizard - Sample Selection

Sample Plate

Select Plate...

New Plate...

Table View

Sample ID	Sample Name	Index1 (I1)	Index2 (I2)
A01	Sample1	LB001	LB001
A02		LB009	LB005
A03		LB017	LB011
A04		LB025	LB022
A05		LB033	LB032
A06		LB041	LB041
A07		LB049	LB046
A08		LB057	LB057
A09		LB065	LB062
A10		LB073	LB072
A11		LB081	LB081
A12		LB089	LB085
B01	Sample2	LB002	LB003
B02		LB010	LB010
B03		LB018	LB016
B04		LB026	LB026
B05		LB034	LB039
B06		LB042	LB042
B07		LB050	LB056
B08		LB058	LB056
B09		LB066	LB066
B10		LB074	LB074
B11		LB082	LB082
B12		LB090	LB090
C01		LB003	LB003
C02		LB011	LB011
C03		LB019	LB019
C04		LB027	LB027
C05		LB035	LB038

Select All

Add Selected Samples ->

Samples to include in sample sheet

Sample ID*

Sample Name

Plate

Well

Index1 (I1)*

I1 Sequence

Index2 (I2)*

I2 Sequence

Sample Project

Description

Sample1		test	A01	LB001	GAAGTGAGCG	LB001	CGCTCAGTTC		
Sample2		test	B01	LB002	AGGTGAGATA	LB002	TATCTGACCT		

Add Blank Row

Remove Selected Rows

Sample Sheet Status: Valid

Reason:

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 2026-06-11

Updated document to current Devyser branding and workflow structure. Revised instructions for clarity and consistency with Illumina Experiment Manager (IEM) workflow. Improved stepwise guidance for sample sheet generation and IEM file installation.

Version 2020-11-03

New.