

Generating a Devyser LB-192 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-192 IEM Files

Download the zip bundle "Index Plate LB-192 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 files into the SamplePrepKits folder:
 - Devyser Index LB-192.txt
 - Devyser Index LB-192 (Plate LB-1).txt
 - Devyser Index LB-192 (Plate LB-2).txt

Add the Devyser Application

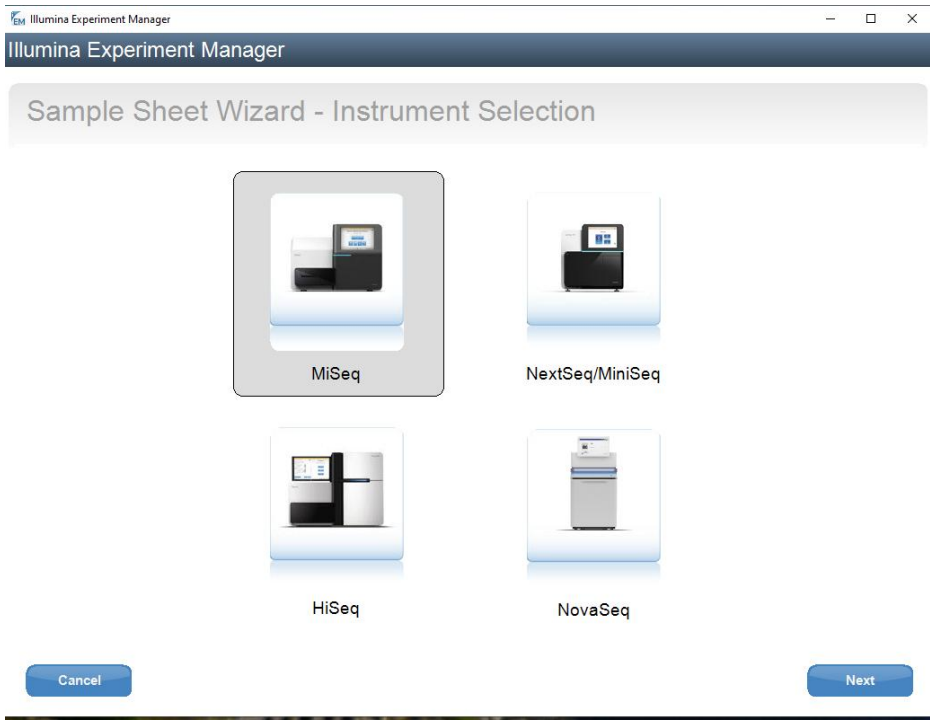
1. Navigate to the IEM installation directory:
Illumina\Illumina Experiment Manager\Applications
2. Copy the file **Devyser Generate FASTQ LB-192.txt** into the Applications folder.
3. If Illumina Experiment Manager is currently running, close and restart the application.

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

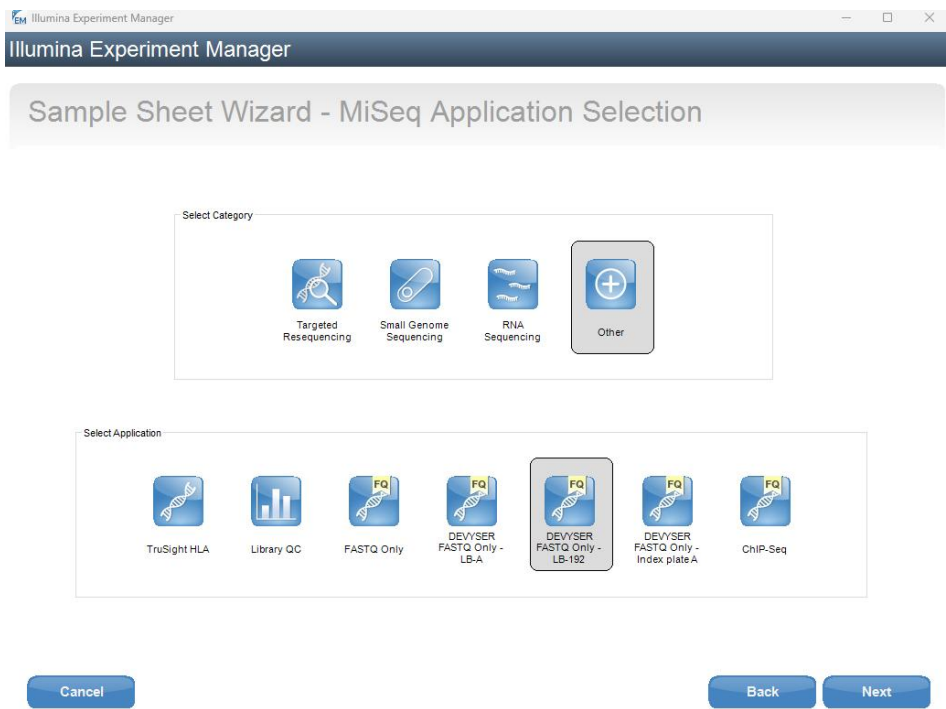
Note: When updating IEM, uninstall the previous version and remove any existing Devyser files from the folders above before installing updated Devyser files.

2. Using Illumina experiment manager with Devyser Index Plate LB-192

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



2. Select "Other" and "DEVYSER FASTQ Only - LB-192" and press "Next"



3. 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.

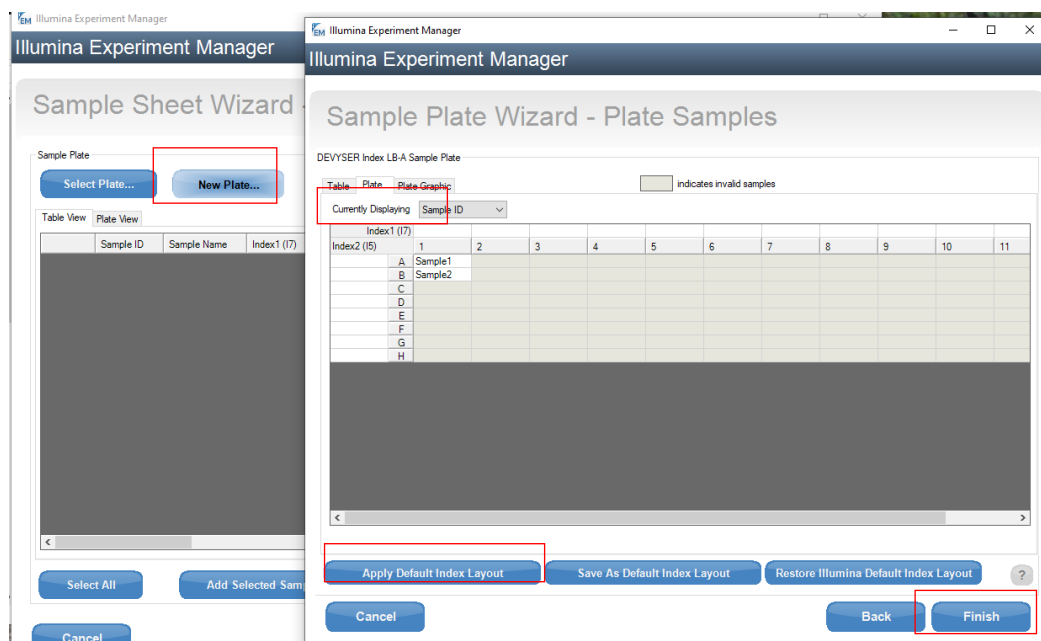
In the **Library Prep Workflow** drop-down menu, select one of the following options:

- **Devyser Index LB-192 (Plate LB-1)** when using indices LB001-LB096 and the default plate layout.
- **Devyser Index LB-192 (Plate LB-2)** when using indices LB097-LB192 and the default plate layout.
- **Devyser Index LB-192** when using indices from both plates or when assigning indices manually.

4. Complete the remaining fields requested by the software wizard and click **Next**.

2.1 Using Devyser Index LB-192 (Plate LB-1) or Devyser Index LB-192 (Plate LB-2)

1. Select **"New Plate..."** in the Sample Sheet Wizard and enter a name for the sample plate.
2. In the **Sample Plate Wizard**, select the **Plate** tab and click **Apply Default Index Layout**.
3. Enter the sample names manually or paste them from Excel. Ensure that sample names comply with Illumina naming conventions.
4. Click **Finish**.



5. Select the samples and click **Add Selected Samples**.
6. Verify the sample and index assignments, then click **Finish** and transfer the sample sheet to the MiSeq instrument.

2.2 Using Devyser Index LB-192

The **Devyser Index LB-192** workflow is intended for runs that require >96 samples or including runs using indices from both LB-1 and LB-2 and require manual index assignment.

1. Enter the samples directly in the **Samples to Include in Sample Sheet** table by selecting **Add Blank Row**.
2. Enter the sample name and assign the desired index ID in both the **Index 1 (I7)** and **Index 2 (I5)** columns.
3. Ensure that Index 1 and Index 2 contain the same index ID for each sample.
4. Repeat until all samples have been added.
5. Verify the sample and index assignments, then click **Finish** and transfer the sample sheet to the MiSeq instrument.

EM

Illumina Experiment Manager

Illumina Experiment Manager

Sample Sheet Wizard - Sample Selection

Sample Plate

Select Plate...

New Plate...

Table View

Plate View

Sample ID	Sample Name	Index1 (I7)	Index2 (I5)
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Select All

Add Selected Samples =>

Cancel

Samples to include in sample sheet

* - required field

Maximize

Sample ID*	Sample Name	Plate	Well	Index1 (I7)*	I7 Sequence	Index2 (I5)*	I5 Sequence	Sample Project	Description
Sample1				LB001	GAACTGAGCG	LB001	CGCTCAGTTC		
Sample2				LB192	CCGGTAACAC	LB192	GTGTTACCGG		

Add Blank Row

Remove Selected Rows

Sample Sheet Status: Valid

Reason:

Back

Finish

3. Index description

The Illumina double indexes introduced during PCR2 are listed in table 1 and 2 below

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

	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

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5 (6)

Table 2: Illumina double indexes used in Index plate LB-2

	1	2	3	4	5	6	7	8	9	10	11	12
A	LB097	LB105	LB113	LB121	LB129	LB137	LB145	LB153	LB161	LB169	LB177	LB185
B	LB098	LB106	LB114	LB122	LB130	LB138	LB146	LB154	LB162	LB170	LB178	LB186
C	LB099	LB107	LB115	LB123	LB131	LB139	LB147	LB155	LB163	LB171	LB179	LB187
D	LB100	LB108	LB116	LB124	LB132	LB140	LB148	LB156	LB164	LB172	LB180	LB188
E	LB101	LB109	LB117	LB125	LB133	LB141	LB149	LB157	LB165	LB173	LB181	LB189
F	LB102	LB110	LB118	LB126	LB134	LB142	LB150	LB158	LB166	LB174	LB182	LB190
G	LB103	LB111	LB119	LB127	LB135	LB143	LB151	LB159	LB167	LB175	LB183	LB191
H	LB104	LB112	LB120	LB128	LB136	LB144	LB152	LB160	LB168	LB176	LB184	LB192

4. References

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

5. Revision history

Version 2026-06-11

New.