

# **Illumina Experiment Manager (IEM) Software v1.14**

## **Release Notes**

*For MiSeq, MiniSeq, NextSeq, HiSeq, and NovaSeq  
Systems*

**27-SEPT-2017**

## Introduction

These Release Notes detail the key changes to Illumina Experiment Manager (IEM) between the specific versions listed in the table below:

<b>Software Application</b>	<b>Prior Version</b>	<b>New Version</b>
<i>Illumina Experiment Manager</i>	1.13	1.14

If you are upgrading from a version before v1.13, review any previous release notes for features and bug fixes introduced in addition to the changes outlined below.

Before installing, click **Start Menu, Control Panel**, and then **Programs and Features** to uninstall any prior version of Illumina Experiment Manager. Note: If IEM v1.6 or higher is already installed, a warning will be displayed before installation of IEM v1.13 can proceed. Earlier versions of IEM (v1.5 or earlier) do not trigger this warning.

### IMPROVEMENTS:

- Added support for assigning samples to individual lanes on NovaSeq flowcells using the NovaSeq Xp Workflow
- Renamed "NextSeq" on the Instrument Selection screen to "NextSeq/MiniSeq"
- Split the "Library Prep Kit" selection into two separate drop-down menus for "Library Prep Workflow" and "Index Adapters" in the Sample Sheet Wizard. Selecting a "Library Prep Workflow" will filter down the list of "Index Adapters" to only those that are compatible. The following table describes the available "Library Prep Workflows" and their compatible "Index Adapters":

Library Prep Workflow	Index Adapters
TruSeq DNA PCR-Free	<ul style="list-style-type: none"> <li>• IDT-ILMN TruSeq DNA UD Indexes (24 Indexes)</li> <li>• IDT-ILMN TruSeq DNA UD Indexes (96 Indexes)</li> <li>• TruSeq DNA CD Indexes (96 Indexes)</li> <li>• TruSeq DNA Single Indexes (A,B)</li> <li>• TruSeq DNA Single Indexes Set A</li> <li>• TruSeq DNA Single Indexes Set B</li> </ul>
TruSeq Nano DNA	<ul style="list-style-type: none"> <li>• IDT-ILMN TruSeq DNA UD Indexes (24 Indexes)</li> <li>• IDT-ILMN TruSeq DNA UD Indexes (96 Indexes)</li> <li>• TruSeq DNA CD Indexes (96 Indexes)</li> <li>• TruSeq DNA Single Indexes (A,B)</li> <li>• TruSeq DNA Single Indexes Set A</li> <li>• TruSeq DNA Single Indexes Set B</li> </ul>
TruSeq Synthetic Long-Read DNA	<ul style="list-style-type: none"> <li>• TruSeq Synthetic Long-Read DNA</li> </ul>
Nextera DNA Flex	<ul style="list-style-type: none"> <li>• Nextera DNA CD Indexes (24 Indexes, tubed)</li> <li>• Nextera DNA Single Indexes (24 Indexes, plated)</li> <li>• Nextera DNA CD Indexes (96 Indexes, plated)</li> </ul>

Library Prep Workflow	Index Adapters
Nextera DNA	<ul style="list-style-type: none"> <li>• Nextera Index Kit (24 Indexes, 96 Samples)</li> <li>• Nextera Index Kit (96 Indexes, 384 Samples)</li> </ul>
Nextera Mate Pair	<ul style="list-style-type: none"> <li>• Nextera Mate Pair</li> </ul>
Nextera Rapid Capture Custom Enrichment	<ul style="list-style-type: none"> <li>• Nextera Rapid Capture Custom Enrichment</li> </ul>
TruSeq DNA Exome Enrichment	<ul style="list-style-type: none"> <li>• TruSeq Exome Kit (8rxn x 3, 6, 9 plex)</li> <li>• TruSeq Exome Kit (8rxn x 12plex)</li> <li>• IDT-ILMN TruSeq DNA UD Indexes (24 Indexes)</li> <li>• IDT-ILMN TruSeq DNA UD Indexes (96 Indexes)</li> <li>• TruSeq DNA CD Indexes (96 Indexes)</li> <li>• TruSeq DNA Single Indexes (A,B)</li> <li>• TruSeq DNA Single Indexes Set A</li> <li>• TruSeq DNA Single Indexes Set B</li> </ul>
TruSeq Rapid Exome	<ul style="list-style-type: none"> <li>• TruSeq Rapid Exome</li> </ul>
Nextera DNA Exome Enrichment	<ul style="list-style-type: none"> <li>• Nextera Exome Kit</li> <li>• Nextera DNA CD Indexes (24 Indexes tubed)</li> <li>• Nextera DNA Single Indexes (24 Indexes plated)</li> <li>• Nextera DNA CD Indexes (96 Indexes plated)</li> </ul>
TruSight Enrichment	<ul style="list-style-type: none"> <li>• TruSight Enrichment</li> </ul>
Nextera XT	<ul style="list-style-type: none"> <li>• Nextera XT Index Kit (24 Indexes, 96 Samples)</li> <li>• Nextera XT Index Kit (96 Indexes, 384 Samples)</li> <li>• Nextera XT Index Kit v2 (96 Indexes, 384 Samples) (Set A-D)</li> </ul>
TruSeq Custom Amplicon	<ul style="list-style-type: none"> <li>• TruSeq Custom Amplicon</li> </ul>
TruSeq Custom Amplicon Low Input	<ul style="list-style-type: none"> <li>• TruSeq Custom Amplicon Low Input</li> </ul>
TruSeq Amplicon Cancer Panel	<ul style="list-style-type: none"> <li>• TruSeq Amplicon Cancer Panel</li> </ul>
TruSight Tumor 26 genes	<ul style="list-style-type: none"> <li>• TruSight Tumor 26 genes</li> </ul>
TruSight Tumor 15 genes	<ul style="list-style-type: none"> <li>• TruSight Tumor 15 genes</li> </ul>
TruSight Myeloid	<ul style="list-style-type: none"> <li>• TruSight Myeloid</li> </ul>
TruSeq ChIP-Seq	<ul style="list-style-type: none"> <li>• TruSeq DNA Single Indexes Set A</li> <li>• TruSeq DNA Single Indexes Set B</li> </ul>
TruSeq DNA Methylation	<ul style="list-style-type: none"> <li>• TruSeq DNA Methylation</li> </ul>
TruSeq Methyl Capture EPIC	<ul style="list-style-type: none"> <li>• TruSeq Methyl Capture EPIC</li> </ul>
TruSeq RNA v2	<ul style="list-style-type: none"> <li>• TruSeq RNA Single Indexes Set A</li> <li>• TruSeq RNA Single Indexes Set B</li> </ul>

Library Prep Workflow	Index Adapters
TruSeq Stranded mRNA	<ul style="list-style-type: none"> <li>• IDT-ILMN TruSeq RNA UD Indexes (24 Indexes)</li> <li>• IDT-ILMN TruSeq RNA UD Indexes (96 Indexes)</li> <li>• TruSeq RNA CD Indexes (96 Indexes)</li> <li>• TruSeq RNA Single Indexes (A,B)</li> <li>• TruSeq RNA Single Indexes Set A</li> <li>• TruSeq RNA Single Indexes Set B</li> </ul>
TruSeq Stranded Total RNA	<ul style="list-style-type: none"> <li>• IDT-ILMN TruSeq RNA UD Indexes (24 Indexes)</li> <li>• IDT-ILMN TruSeq RNA UD Indexes (96 Indexes)</li> <li>• TruSeq RNA CD Indexes (96 Indexes)</li> <li>• TruSeq RNA Single Indexes (A,B)</li> <li>• TruSeq RNA Single Indexes Set A</li> <li>• TruSeq RNA Single Indexes Set B</li> </ul>
TruSeq RNA Exome Enrichment	<ul style="list-style-type: none"> <li>• IDT-ILMN TruSeq RNA UD Indexes (24 Indexes)</li> <li>• IDT-ILMN TruSeq RNA UD Indexes (96 Indexes)</li> <li>• TruSeq RNA CD Indexes (96 Indexes)</li> <li>• TruSeq RNA Single Indexes (A,B)</li> <li>• TruSeq RNA Single Indexes Set A</li> <li>• TruSeq RNA Single Indexes Set B</li> </ul>
TruSeq RNA Access	<ul style="list-style-type: none"> <li>• TruSeq RNA Single Indexes Set A</li> <li>• TruSeq RNA Single Indexes Set B</li> </ul>
TruSeq Targeted RNA Expression	<ul style="list-style-type: none"> <li>• TruSeq Targeted RNA Expression</li> </ul>
TruSeq Small RNA	<ul style="list-style-type: none"> <li>• TruSeq Small RNA</li> </ul>
TruSeq Ribo Profile	<ul style="list-style-type: none"> <li>• TruSeq Ribo Profile</li> </ul>
Script Seq Complete	<ul style="list-style-type: none"> <li>• ScriptSeq Complete</li> </ul>
ScriptSeq v2	<ul style="list-style-type: none"> <li>• ScriptSeq v2</li> </ul>
SureCell WTA 3'	<ul style="list-style-type: none"> <li>• SureCell WTA 3'</li> </ul>

**DEFECT REPAIRS:**

- Fixed issue where HiSeq Sample Sheets could not be edited within IEM. Please note that HiSeq Sample Sheets generated from previous versions of IEM (v1.13 or earlier) cannot be edited with IEM v1.14
- Fixed issue with the Sample Plate Wizard where the "Sample ID" would not be required. IEM v1.14 now requires that the "Sample ID" field is filled in before saving the Sample Plate file
- Fixed display issues with the Sample Plate Wizard when switching between single and dual index options
- Fixed display issue with the Sample Sheet Wizard where the "Reverse Complement" option would disappear for HiSeq 1500/2500 when moving back and forth between different steps

**KNOWN ISSUES:**

- The appearance of the software's user interface may be distorted when the Windows operating system display settings are configured to use enlarged font sizes. To remedy this, change the Windows font size display settings to 100%

**OTHER:**

- Updated IEM Sample Sheet file format ("IEMFileVersion") to version 5. Please note that Sample Sheet files generated outside of IEM or from previous versions of IEM (v1.13 or earlier) cannot be edited with IEM v1.14
- Removed option to select 0 index reads in the Sample Plate Wizard. Please note that the option to select 0 index reads in the Sample Sheet Wizard is still available
- Removed support for NeoPrep systems
- Removed Sample Sheet Wizard support for the following HiSeq applications:
  - Human Genome Resequencing
  - HiSeq Enrichment
  - HiSeq CASAVA (Legacy)