

## Local Run Manager

## Library QC Analysis Module v2.1

## **Release Notes**



#### Introduction

These Release Notes detail notable items for the Local Run Manager Library QC Analysis Module v2.1 release.

Please note that the Library QC Analysis Module v2.1 requires Local Run Manager Framework v3.0 or higher and is not compatible with Local Run Manager Framework v2.0 or lower. For more information on module version compatibility per instrument platform, refer to Local Run Manager Module Selector.

For more information about this analysis module and how to use it, refer to the Local Run Manager Generate FASTQ Analysis Module Workflow Guide, available from the Local Run Manager Support Page, Documentation & Literature.

#### **NEW FEATURES:**

- Illumina Library Prep Kits (LPK) and Index Adapter Kits (IAK) are decoupled.
  - Users now able to choose both the LPK and IAK options from Local Run Manager interface.
  - Sample sheet export from Local Run Manager will now include the Index Kits field aside from the Library Prep Kits.
  - $\circ$   $\;$  Added support for custom Library Prep Kits and Index Kits.
  - Added UMI Anchor Kit toggle for applicable Index Kits.
  - Added separate directories for Illumina Library Prep Kits and Index Kits.
- Updated Library Prep Kit names with corresponding Index Adapter Kits.

| Library<br>Prep<br>Kit | Illumina DNA PCR-Free 2x149                                      | Illumina DNA PCR-Free 2x151                                      |
|------------------------|--|--|
| Index<br>Kits          | IDT-IImn DNA-RNA UD Indexes<br>SetA Tagmentation - ILMN PCR-Free | IDT-IImn DNA-RNA UD Indexes SetA<br>Tagmentation - ILMN PCR-Free |
|                        | IDT-IImn DNA-RNA UD Indexes SetB<br>Tagmentation - ILMN PCR-Free | IDT-IImn DNA-RNA UD Indexes SetB<br>Tagmentation - ILMN PCR-Free |
|                        | IDT-IImn DNA-RNA UD Indexes<br>SetC Tagmentation - ILMN PCR-Free | IDT-IImn DNA-RNA UD Indexes SetC<br>Tagmentation - ILMN PCR-Free |
|                        | IDT-IImn DNA-RNA UD Indexes<br>SetD Tagmentation - ILMN PCR-Free | IDT-IImn DNA-RNA UD Indexes<br>SetD Tagmentation - ILMN PCR-Free |

| old name                    | new name                          |
|-----------------------------|-----------------------------------|
| Nextera Flex for Enrichment | Illumina DNA Prep with Enrichment |
| Nextera DNA Flex            | Illumina DNA Prep                 |

# illumına<sup>,</sup>

| Library Prep Kits                 | Index Kits  |
|-----------------------------------|---|
|                                   | IDT-Ilmn DNA-RNA UD Indexes SetA Tagmentation             |
|                                   | IDT-Ilmn DNA-RNA UD Indexes SetB Tagmentation             |
|                                   | IDT-IImn DNA-RNA UD Indexes SetC Tagmentation             |
|                                   | IDT-IImn DNA-RNA UD Indexes SetD Tagmentation             |
| Illumina DNA Prep                 | IDT-IImn DNA-RNA UD Indexes SetABCD Tagmentation          |
|                                   | IDT-ILMN Nextera DNA UD Indexes Set C - 96 Indexes        |
|                                   | IDT-ILMN Nextera DNA UD Indexes Set D - 96 Indexes        |
|                                   | IDT-ILMN Nextera DNA UD Indexes Set A B C D - 384 Indexes |
|                                   | Nextera DNA CD Indexes - 24 Indexes Tubed                 |
|                                   | Nextera DNA CD Indexes - 96 Indexes Plated                |
|                                   | IDT-Ilmn DNA-RNA UD Indexes SetA Tagmentation             |
|                                   | IDT-IImn DNA-RNA UD Indexes SetB Tagmentation             |
|                                   | IDT-IImn DNA-RNA UD Indexes SetC Tagmentation             |
| Illumina DNA Prep with Enrichment | IDT-IImn DNA-RNA UD Indexes SetD Tagmentation             |
|                                   | IDT-IImn DNA-RNA UD Indexes SetABCD Tagmentation          |
|                                   | IDT-ILMN Nextera DNA UD Indexes Set C - 96 Indexes        |
|                                   | IDT-ILMN Nextera DNA UD Indexes Set D - 96 Indexes        |
|                                   | IDT-ILMN Nextera DNA UD Indexes Set A B C D - 384 Indexes |

- Added Customer primers use warning when applicable on the interface.
- Removed Show Index Name/Sequence option when the Library Prep Kit is set to Custom.
- Obsoleted SureCell Single Cell RNA 1.0 Library Prep Kit.
- Compatibility check with Local Run Manager Framework v3.0 only.
- Removed html and js folders under the Module directory UI folder.
- Windows 10 integration updates.

#### **DEFECT REPAIRS:**

• Fixed issue where Samples Output Sheet and Results page were at an incorrect order.

#### **KNOWN ISSUES:**

#### MISEQ SUITE V4.0 KNOWN INTEGRATION ISSUES:

- When importing sample sheet onto the MiSeq Control SW, unclear error message might be displayed. Check sample sheet if error is seen.
  - Common issues include formatting, ensure headers are specified, ensure Workflow field is exactly as Local Run Manager interface displays, etc.
- Sample table grid are not perfectly aligned with the Sample Number column as higher sample number are added.
- Analysis terminated with error message of unable to merge temporary Tribble output file. Starling aligner option is recommended me until issue is fixed.



- During Module update, library prep kit that were no longer supported still persist. To update Library Prep Kit list, follow below steps.
  - 1. Uninstall previous module (if any)
  - 2. Uninstall current module
  - 3. Uninstall all components of LRM including Postgres
  - 4. Re-install LRM
  - 5. Re-install current module

#### **OTHER:**

• When using a custom kit, you must always enter your i5 indexes in the MiSeq or forward orientation. Local Run Manager will automatically reverse complement the indexes when writing the sample sheet used for analysis.

### **PREVIOUS RELEASE NOTES**

### LOCAL RUN MANAGER LIBRARY QC MODULE V1.1

**NEW FEATURES:** 

• Optimization improvement on analysis worker.

#### **DEFECT REPAIRS:**

• Fixed issue where analysis crashed with 96 samples run on iSeq100 instruments.

**KNOWN ISSUES:** 

- When the user selects certain library prep kits, like Nextera DNA, the I7 and I5 index fields will not be marked as required fields.
- Custom Primers don't update in the Local Run Manager run if they are updated in the Control Software.
- If the Local Run Manager Analysis Service is restarted, this could cause a running analysis to crash.

#### **OTHER:**

• When using a custom kit, you must always enter your i5 indexes in the MiSeq or forward orientation. Local Run Manager will automatically reverse complement the indexes when writing the sample sheet used for analysis.

### LOCAL RUN MANAGER LIBRARY QC MODULE V1.0

#### **NEW FEATURES:**

Initial Release



**DEFECT REPAIRS:** 

• N/A

**KNOWN ISSUES:** 

- When the user selects certain library prep kits, like Nextera DNA, the I7 and I5 index fields will not be marked as required fields.
- Custom Primers don't update in the Local Run Manager run if they are updated in the Control Software.
- If the Local Run Manager Analysis Service is restarted, this could cause a running analysis to crash.

**OTHER:** 

• When using a custom kit, you must always enter your i5 indexes in the MiSeq or forward orientation. Local Run Manager will automatically reverse complement the indexes when writing the sample sheet used for analysis.