

Local Run Manager

Customer Release Notes

Small RNA Analysis Module v3.1

For NextSeq 550 RUO, MiSeq RUO, iSeq and MiniSeq Instruments

December 15, 2024

SMALL RNA MODULE v3.1

Introduction

These Release Notes detail notable items for the Local Run Manager Small RNA Analysis Module v3.1 release.

Please note that the Small RNA Analysis Module v3.1 requires Local Run Manager Framework v4.0 or higher and is not compatible with Local Run Manager Framework v3.0 or lower. For more information on module version compatibility per instrument platform, refer to Local Run Manager Module Selector (<https://customprotocolselector.illumina.com/selectors/LRM-module-selector/Content/Source/FrontPages/LRM-module-selector.htm>).

For more information about this analysis module and how to use it, refer to the Local Run Manager Small RNA Analysis Module Workflow Guide, available from the Illumina Local Run Manager Support Page (https://support.illumina.com/sequencing/sequencing_software/local-run-manager/documentation.html), Documentation & Literature.

NEW FEATURES:

- All settings, including the Custom Primer Settings will be converted to lower case.

FIXED ISSUES:

- Fixed the discrepancy of the FASTQ data generation.
- Fixed issue where Custom Primers don't update in the Local Run Manager run if they are updated in the Control Software.
- Fixed issue where Adapter trimming settings do not save on LRM UI.

KNOWN ISSUES:

- Graph in the Sample Report (under the Samples and Results UI tab) overflows at default zoom. Set browser zoom to 80% for proper display.
- If the Local Run Manager Analysis Service is restarted, this could cause a running analysis to crash. Analysis can be requeued if this happens.

OTHER:

- When using a custom kit, you must always enter your i5 indexes in forward orientation.
- Local Run Manager will automatically reverse complement the i5 indexes when writing the Sample Sheet used for analysis in the NextSeq 550, iSeq and MiniSeq. Local Run Manager will not reverse complement i5 indexes in MiSeq.
- Following analysis software are integrated in the Small RNA Analysis Module.
 - BuildFASTQ v2.5.53.7 is used for BCL to FASTQ conversion
 - Bowtie v0.12.8 is used for alignment

PREVIOUS RELEASE NOTES

SMALL RNA MODULE v3.0

Introduction

These Release Notes detail notable items for the Local Run Manager Small RNA Analysis Module v3.0 release.

Please note that the Small RNA Analysis Module v3.0.0 requires Local Run Manager Framework v4.0 or higher and is not compatible with Local Run Manager Framework v3.0 or lower. For more information on module version compatibility per instrument platform, refer to <https://customprotocolselector.illumina.com/selectors/LRM-module-selector/Content/Source/FrontPages/LRM-module-selector.htm>.

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

https://support.illumina.com/sequencing/sequencing_software/local-run-manager/documentation.html

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 on a separate line from the Library Prep Kits.
 - Added support for custom Library Prep Kits and Index Kits.
 - Added separate directories for Illumina Library Prep Kits and Index Kits.
- Added Custom Primers use warning when applicable on the interface.
- Removed Show Index Name/Sequence option when the Library Prep Kit is set to Custom.
- Compatibility check with Local Run Manager Framework v4.0 only.

FIXED ISSUES:

- Fixed issue where the charts displayed in Aggregate Summary report are blank.
- Fixed issue where no error will display if user enters two samples and zero index reads.

KNOWN ISSUES:

- Custom Primers don't update in the Local Run Manager run if they are updated in the Control Software.
- When importing Sample Sheet, custom setting value will always set all the letters to lower case.

- If the Local Run Manager Analysis Service is restarted, this could cause a running analysis to crash. Analysis can be requeued if this happens.

OTHER:

- When using a custom kit, you must always enter your i5 indexes in forward orientation.
- Local Run Manager will automatically reverse complement the i5 indexes when writing the Sample Sheet used for analysis in the NextSeq 550, iSeq and MiniSeq. Local Run Manager will not reverse complement i5 indexes in MiSeq.

SMALL RNA MODULE v2.0

Introduction

These Release Notes detail notable items for the Local Run Manager Small RNA Analysis Module v2.0 release.

Please note that the Small RNA Analysis Module v2.0 requires Local Run Manager Framework v2.0.0 or higher and is not compatible with Local Run Manager Framework v1.3.1 or lower.

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

http://support.illumina.com/sequencing/sequencing_software/local-run-manager/documentation.html

NEW FEATURES:

- Added support for processing datasets generated from iSeq 100, MiniSeq, MiSeq, and NextSeq 550 sequencing systems.
- Added support for importing and exporting Sample Sheet files on the Run Setup page.
- Added support for entering custom index sequences directly on the Run Setup page.
- Added support for the following special characters to be used as part of the "Run Name" and "Run Description" on the Run Setup page:
 - ` ~ ! @ # \$ % - _ { }
- Increased the maximum number of samples on the Run Setup page to 1536.
- Validate chemistry type.
- Apply a filter for RNA only genomes.
- Add Readme file with used open source software license agreements.

FIXED ISSUES:

- None

KNOWN ISSUES:

- No error will display if user enters two samples and zero index reads. The Save Run button will remain disabled, ensuring the user cannot save the run with the invalid settings.
- Custom Primers don't update in the Local Run Manager run if they are updated in the Control Software.
- When importing Sample Sheet, custom setting value will always set the first letter to lower case.
- If the Local Run Manager Analysis Service is restarted, this could cause a running analysis to crash.

Release History

Revision	Release Reference	Originator	Description of Change
00	ER 1004586	Arthur Wang	Initial Release for Small RNA Analysis Module v1.0
01	ER 1026974	Arthur Wang	Updated for Small RNA Analysis Module v2.0
02	CN 1101973	Yan Hui Hew	<ul style="list-style-type: none"> - Incorporated the CRN template rev01 - Added a new section for Small RNA Analysis Module v3.0 - Moved the previous version of Small RNA Analysis Module v2.0 under "Previous Release Notes"
03	CN 1115889	Yan Hui Hew	Added a new section for Small RNA Analysis Module v3.1