

Generating a Devyser sample sheet with Illumina LRM

Generate a sample sheet for each Devyser run by using the Illumina Local Run Manager (LRM) software according to the current software guide^{1,2}. The LRM can be installed on the Illumina® MiSeq™, MiniSeq™ or iSeq™ 100 computer.

Before proceeding with these instructions, ensure that the LRM 'GenerateFASTQ' Analysis Module is installed.

These instructions are applicable for LRM v2 and later. Please contact techsupport@devyser.com if the software version is incompatible.

1. LRM File Import

Download the zip file 'LRM files_YYYY-MM-DD' from the Devyser website and unzip the files.

- A. Open LRM and open 'Library Prep Kits' from the TOOLS drop-down menu
- B. Select 'Add Library Prep Kit'
- C. Import the un-zipped .tsv file for the desired sequencing mode (Devyser 2x151, Devyser 1x301, or Devyser 2x76) and ensure that it is present in the Library Prep Kits list

2. Sample sheet generation

- A. From the RUN DASHBOARD, select 'Create Run' in the upper right corner and choose 'GenerateFASTQ'
- B. Enter a 'Run Name' and 'Run Description' of your choosing
- C. Select a previously imported Library Prep Kits from the Run Settings subheader (e.g., Devyser 2x151). For further information about the sequencing mode, refer to the Devyser kit-specific IFU/Handbook
- D. Scroll down and select the '+' symbol besides 'Rows' to add the desired number of rows/samples
- E. Enter the sample names in the Sample ID column
- F. In the INDEX 1 (I7) column, choose the correct index (N701-N712) in the drop-down menu (see tables 1-3)
- G. In the INDEX 2 (I5) column, choose the correct index (N501-N508) in the drop-down menu (see tables 1-3)
- H. Click on 'Save Run', or 'Export Sample Sheet' to be imported at a later date

3. Index Description

The Illumina double indexes introduced during PCR2 are listed in tables 1-3.

Table 1: Illumina double index used in Index strip A1

	Index1: N701
Index2: N501	1
Index2: N502	2
Index2: N503	3
Index2: N504	4
Index2: N505	5
Index2: N506	6
Index2: N507	7
Index2: N508	8

Table 2: Illumina double index used in Index strip A2

	Index1: N701	Index1: N702	Index1: N703
Index2: N501	1	9	17
Index2: N502	2	10	18
Index2: N503	3	11	19
Index2: N504	4	12	20
Index2: N505	5	13	21
Index2: N506	6	14	22
Index2: N507	7	15	23
Index2: N508	8	16	24

Table 3: Illumina double index used in Index strip A3

	Index1: N701	Index1: N702	Index1: N703	Index1: N704	Index1: N705	Index1: N706	Index1: N707	Index1: N708	Index1: N709	Index1: N710	Index1: N711	Index1: N712
Index2: N501	1	9	17	25	33	41	49	57	65	73	81	89
Index2: N502	2	10	18	26	34	42	50	58	66	74	82	90
Index2: N503	3	11	19	27	35	43	51	59	67	75	83	91
Index2: N504	4	12	20	28	36	44	52	60	68	76	84	92
Index2: N505	5	13	21	29	37	45	53	61	69	77	85	93
Index2: N506	6	14	22	30	38	46	54	62	70	78	86	94
Index2: N507	7	15	23	31	39	47	55	63	71	79	87	95
Index2: N508	8	16	24	32	40	48	56	64	72	80	88	96

4. References

¹Local Run Manager v2 Software Guide (Illumina document # 1000000002702)

²Local Run Manager v3 Software Guide (Illumina document # 1000000111492)

5. Revision History

Version 2023-11-01

Updated compatible versions of LRM

Version 2020-05-26

New