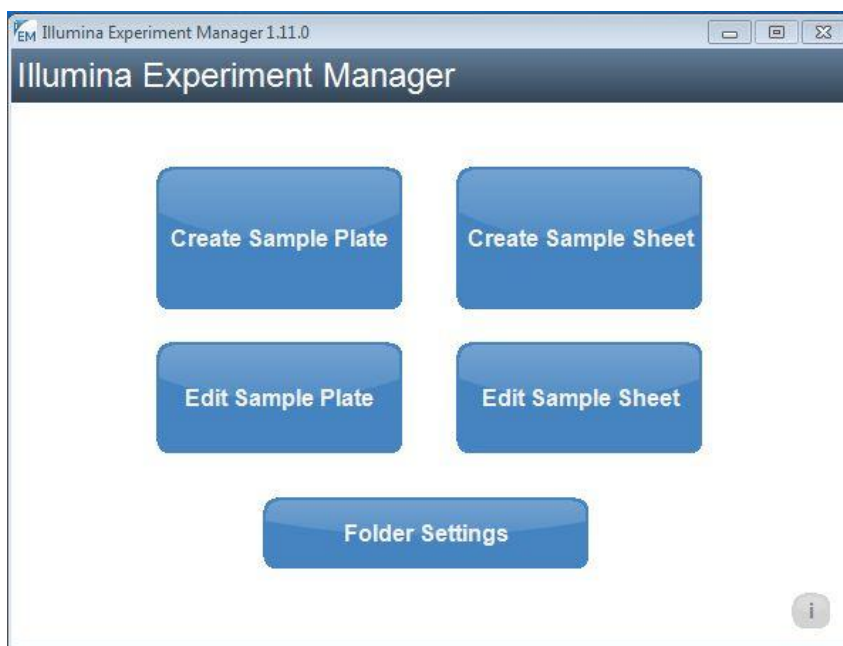
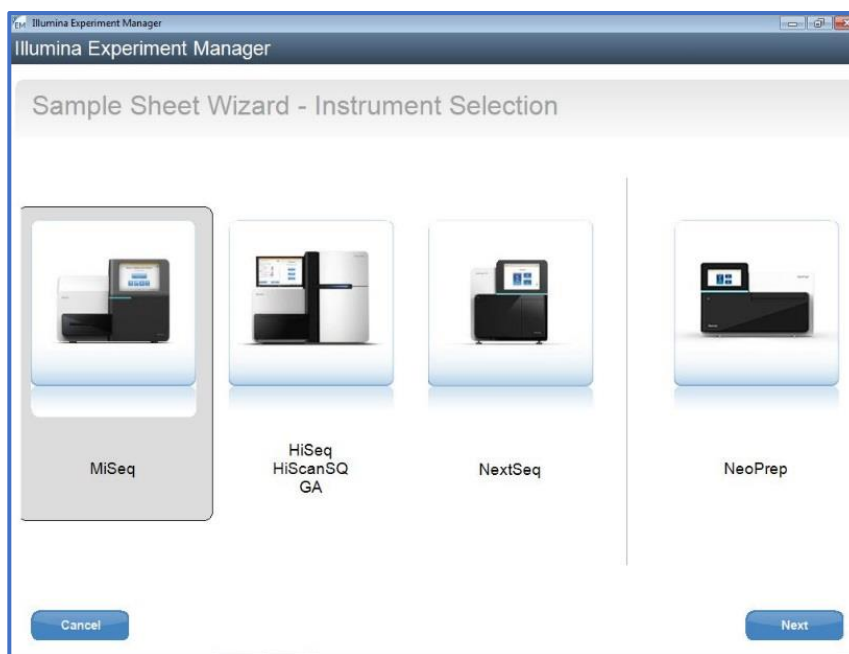


How to Set Up Illumina Experiment Manager Using sparQ Adapter Barcode Sets

1. Open the Illumina Experiment Manager software (v1.11.0 used as an example).
2. From the main screen, choose Create Sample Sheet.



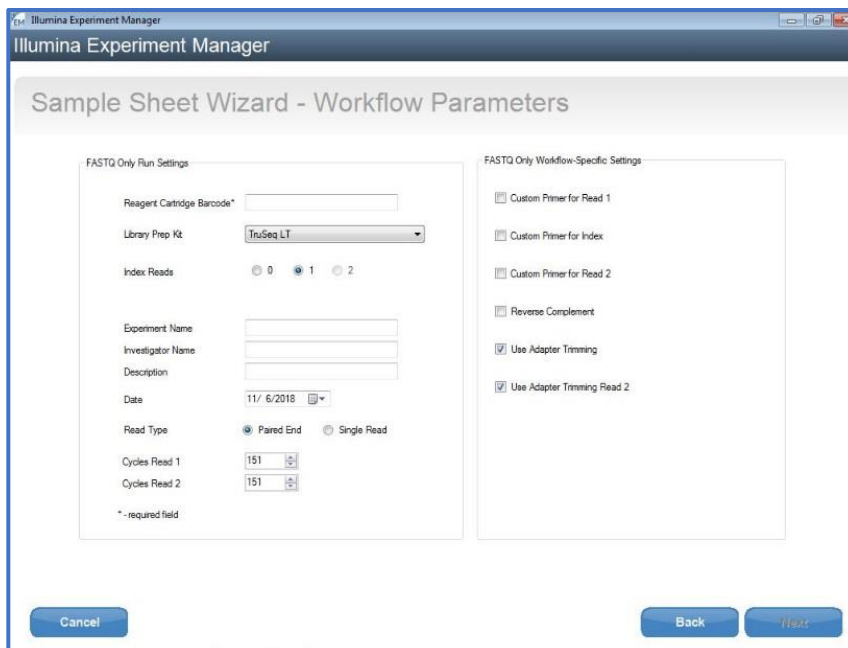
3. Select the sequencer (MiSeq used as an example), and then select Next



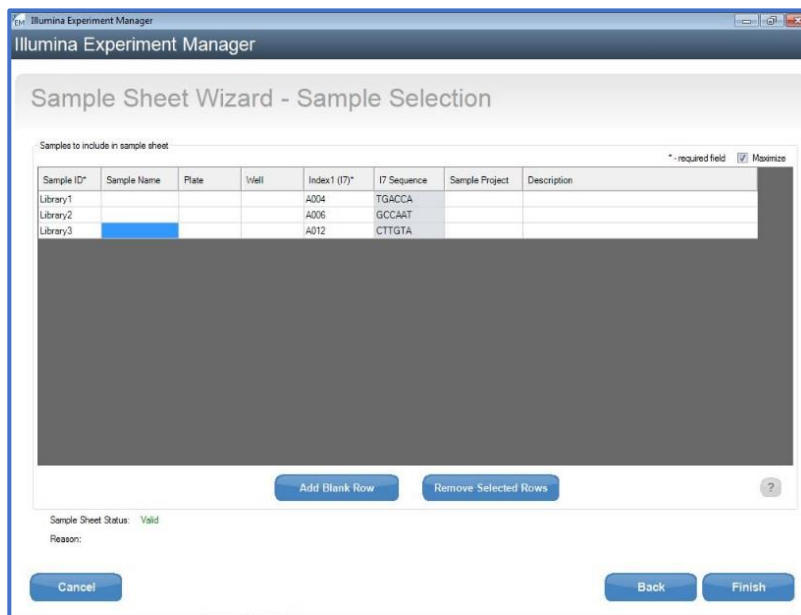
4. Select the appropriate application (Other -> FASTQ only used as an example), and then select Next.



5. In the Workflow Parameters page, select TruSeq LT for Library Prep Kit and 1 for Index Reads. Enter other information as required (no custom primers needed for sparQ Adapters). Select Next to Sample Selection.



- Select Add Blank Row to add rows and enter sample information. sparQ Adapter Barcode numbers correspond to Index1 (I7) numbers. For example, select A004 in the Index1 (I7) field for sparQ Adapter Barcode 4; select A012 in the Index1 (I7) field for sparQ Adapter Barcode 12. Enter other information as required and select Finish to complete the sample sheet.



sparQ Adapter Barcode Sets

sparQ Adapter Barcode Sets A and B are single index barcoded oligonucleotide adapters designed for use with the Quantabio sparQ DNA Library Prep Kits in the construction of libraries for Illumina NGS platforms. Each sparQ Adapter Barcode Set contains 12 single index barcodes for 96 rxns.

sparQ Adapter Barcode Set A

sparQ Adapter Barcode Set A Corresponding Illumina Experiment Manager Sample Sheet Entry

Barcode Number	Barcode Sequence	Index 1 (I7)	I7 Sequence
2	CGATGT	A002	CGATGT
4	TGACCA	A004	TGACCA
5	ACAGTG	A005	ACAGTG
6	GCCAAT	A006	GCCAAT
7	CAGATC	A007	CAGATC
12	CTTGTA	A012	CTTGTA
13	AGTCAA	A013	AGTCAA
14	AGTTCC	A014	AGTTCC
15	ATGTCA	A015	ATGTCA
16	CCGTCC	A016	CCGTCC
18	GTCCGC	A018	GTCCGC
19	GTGAAA	A019	GTGAAA

sparQ Adapter Barcode Set B

sparQ Adapter Barcode Set B		Corresponding Illumina Experiment Manager Sample Sheet Entry	
Barcode Number	Barcode Sequence	Index 1 (I7)	I7 Sequence
1	ATCACG	A001	ATCACG
3	TTAGGC	A003	TTAGGC
8	ACTTGA	A008	ACTTGA
9	GATCAG	A009	GATCAG
10	TAGCTT	A010	TAGCTT
11	GGCTAC	A011	GGCTAC
20	GTGGCC	A020	GTGGCC
21	GTTTCG	A021	GTTTCG
22	CGTACG	A022	CGTACG
23	GAGTGG	A023	GAGTGG
25	ACTGAT	A025	ACTGAT
27	ATTCCT	A027	ATTCCT

Pooling/Multiplexing Guidelines

The following table provides pooling strategies for single-indexed sequencing on Illumina platforms using sparQ Adapter Barcode Sets A and B.

For low-plexity pooling (up to 4-plex), use unique and compatible barcoded adapters outlined below.

For high-plexity pooling (5- to 11-plex), use any of the 4-plex options with any other available barcoded adapters.

Plexity	Option	Set A	Set B
2-Plex	1	Barcoded adapter 6 and 12	Not recommended
	2	Barcoded adapter 5 and 19	Not recommended
3-Plex	1	Barcoded adapter 2, 7, and 19	Barcoded adapter 1, 10, and 20
	2	Barcoded adapter 5, 6, and 15	Barcoded adapter 3, 9, and 25
	3	Any of the 2-plex option with any other available barcoded adapter	Barcoded adapter 8, 11, and 22
4-Plex	1	Barcode 5, 6, 12, and 19	Barcoded adapter 1, 8, 10, and 11
	2	Barcode 2, 4, 7, and 16	Barcoded adapter 3, 9, 22, and 27
	3	Any of the 3-plex option with any other available barcoded adapter	Any of the 3-plex option with any other available barcoded adapter