

NovaSeq Requirements													
	Standard version								XP version				
	NovaSeq 6000_S1 100 cycle kit	NovaSeq 6000_S1 200 cycle kit	NovaSeq 6000_S1 100 cycle kit	NovaSeq 6000_S2 100 cycle kit	NovaSeq 6000_S2 200 cycle kit	NovaSeq 6000_S2 300 cycle kit	NovaSeq 6000_S4 200 cycle kit	NovaSeq 6000_S4 300 cycle kit	NovaSeq 6000_S2 100 cycle kit_XP version	NovaSeq 6000_S2 200 cycle kit_XP version	NovaSeq 6000_S2_00 cycle kit_XP version	NovaSeq 6000_S4 200 cycle kit_XP version	NovaSeq 6000_S4 300 cycle kit_XP version
Number of Lanes	2	2	2	2	2	2	4	4	2	2	2	4	4
Minimum Volume (ul)	100	100	100	150	150	150	310	310	25	25	25	30	30
Molarity, preferred	5	5	5	5	5	5	5	5	5	5	5	5	5
Molarity, min to make with NO dilution in prep to run FC	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	2.5	2.5	2.5	2.5	2.5
Number of Clusters/lane	1 B	1 B	1 B	3.3 B	3.3 B	3.3 B	8 B	8 B	1.6 B	1.6 B	1.6 B	2 B	2 B
Number of Paired End Reads Per Lane	2 B	2 B	2 B	6.6 B	6.6 B	6.6 B	16 B	16 B	3.3 B	3.3 B	3.3 B	4 B	4 B
Number of Single End Reads Per Lane	1 B	1 B	1 B	3.3 B	3.3 B	3.3 B	8 B	8B	1.6 B	1.6 B	1.6 B	2 B	2 B

Recommended Number of Samples Per Pool for NOVAseq Platform													
	Standard version								XP version - per lane				
	NovaSeq 6000_S1 100 cycle kit	NovaSeq 6000_S1 200 cycle kit	NovaSeq 6000_S1 100 cycle kit	NovaSeq 6000_S2 100 cycle kit	NovaSeq 6000_S2 200 cycle kit	NovaSeq 6000_S2 300 cycle kit	NovaSeq 6000_S4 200 cycle kit	NovaSeq 6000_S4 300 cycle kit	NovaSeq 6000_S2 100 cycle kit_XP version	NovaSeq 6000_S2 200 cycle kit_XP version	NovaSeq 6000_S2_00 cycle kit_XP version	NovaSeq 6000_S4 200 cycle kit_XP version	NovaSeq 6000_S4 300 cycle kit_XP version
WGS - human/mouse/rat (3Gb)	*	*	3	*	*	10	*	24	*	*	5	*	6
WGS - Arabidopsis (135Mb)	*	*	88	*	*	220	*	528 **	*	*	110	*	132
Total RNAseq (~80 millions clusters)	25	*	*	50	*	*	120	*	25	*	*	30	*
Total RNAseq (~50 millions clusters)	34	*	*	80	*	*	192	*	40	*	*	48	*
mRNAseq (25 millions clusters)	64	*	*	160	*	*	384	*	80	*	*	96	*
Whole Exome - assumes ~8Gb/100x	*	40	*	*	100	*	250	*	*	50	*	63	*
single cell 10x (26x8x98)	*	4	*	*	10	*	24	*	*	5	*	6	*
Genomic 10x	*	*	3	*	*	10	*	24	*	*	5	*	6

*na – HTSF is not using this type of library prep for selected sequencing format. Always contact HTSF w/ study specific questions.

** Note barcodes beyond 384 are not currently available.

