



### Samples Demultiplexed via Unique 8nt i7 Index

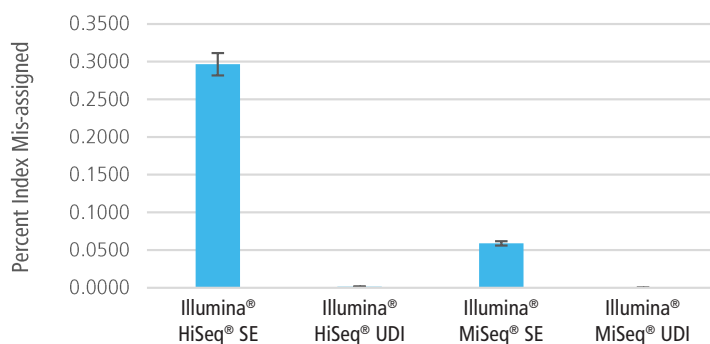
		Amplicon							
		1	2	3	4	5	6	7	8
Index	1	99.84	0.02	0.02	0.04	0.02	0.02	0.07	0.08
	2	0.03	99.82	0.02	0.06	0.03	0.02	0.21	0.09
	3	0.03	0.03	99.86	0.07	0.02	0.03	0.11	0.1
	4	0.02	0.03	0.02	99.58	0.02	0.02	0.09	0.09
	5	0.03	0.03	0.03	0.09	99.85	0.04	0.13	0.09
	6	0.02	0.02	0.01	0.05	0.02	99.83	0.08	0.06
	7	0.01	0.02	0.01	0.02	0.01	0.01	99.15	0.04
	8	0.03	0.04	0.02	0.09	0.03	0.03	0.16	99.46

### Samples Demultiplexed via Unique 8nt i7 Index & Unique 8nt i5 Index

		Amplicon							
		1	2	3	4	5	6	7	8
Index	1	100	0	0	0	0	0	0	0
	2	0	99.9	0	0	0	0	0	0
	3	0	0.01	100	0	0	0.01	0	0
	4	0	0	0	100	0	0	0	0
	5	0	0	0	0	100	0	0	0
	6	0	0	0	0	0	99.9	0	0
	7	0	0	0	0	0	0	100	0
	8	0	0	0	0	0	0	0	100

**Figure 1. NEXTFLEX® unique dual index Barcodes decrease index mis-assignment on the Illumina® HiSeq® 4000 platform.** A set of libraries prepared using NEXTFLEX® unique dual index barcodes was sequenced on the HiSeq® 4000 sequencing platform. The numbers indicate percentage of correct insert reads assigned to index sequences. The resultant data was demultiplexed twice: first by taking only the unique I7 index into account (left panel), and second by taking both unique I7 and I5 indexes into account (right panel). By assessing both the unique I7 and I5 indexes, sequence mis-assignment was drastically decreased.

### Unique Dual Index vs. Single Index on Illumina® HiSeq® & MiSeq® Platforms



**Figure 2. NEXTFLEX® Unique Dual Index Barcodes increase confidence in sequencing data.** The data generated on the HiSeq® 4000 platform showed a dramatic reduction in the percentage of mis-assigned reads, and the data generated on the MiSeq® platform also showed a reduction. The results indicate that the NEXTFLEX® unique dual index barcodes greatly reduce the amount of mis-assigned reads in data sets, and that this occurs at a higher rate on the instruments that use exclusion amplification chemistry and patterned flow cells.

## ORDERING INFORMATION

Catalog #	Kit Name	Quantity
NOVA-514150	NEXTFLEX® Unique Dual Index Barcodes (96 barcodes)	192 rxns



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AG011802\_06\_FL Printed in USA



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