

384 Single-Index Barcodes Enabling Deep Multiplexing of Illumina®-Compatible Libraries

NEXTflex-HT™ Barcodes

- Single-index adapters for multiplexing up to 384 Illumina libraries
- Compatible with both paired-end and single-read Illumina sequencing
- Maximum flexibility of Illumina-suitable pooling combinations

The NEXTflex-HT™ Barcodes are Illumina®-compatible single-index adapters that provide unprecedented flexibility and high-throughput capabilities in sequencing applications. Multiplexing with NEXTflex-HT Barcodes drastically increases scale while reducing costs, by allowing the user to pool multiple libraries in a single flow cell lane.

These barcodes can be used with single read or paired-end read sequencing and are compatible with NEXTflex library prep kits designed for Illumina® sequencing, and other Illumina® library preparation workflows that involve the ligation of adapters to adenylated fragments. Currently 384 barcodes are available; however, greater than 2,000 are being developed.

Dual Error Correction Prevents Ambiguity

The NEXTflex-HT Barcodes utilize a single-index adapter containing a 12 nt unique sequence. The 12 nt indices are designed with a Hamming Distance of at least five throughout the entire series of 2380, permitting dual error correction. Dual error correction enables proper differentiation between samples, by preventing ambiguity from PCR errors or sequencing instrument miscalling. The NEXTflex-HT index is contained within the adapter sequence, making PCR enrichment optional.

Reduce Run-to-Run Sample Carryover and Sample Crosstalk

Even users who don't routinely perform high-throughput multiplexing benefit from the superior design of the NEXTflex-HT Barcodes. The ability to avoid using the same set of indices consecutively reduces concerns about run-to-run sample carryover and sample crosstalk. Plus, each pair of consecutive barcodes are fully color balanced and can be used for low level multiplexing. NEXTflex-HT™ Barcodes - 6 are supplied in tubes containing 8 reactions of each barcode. The sets of 96 NEXTflex-HT™ Barcodes are supplied in 96-well plates with each well containing 2 reactions of each barcode.

Cat #	Product	Quantity
514170	NEXTflex-HT™ Barcodes - 6 (in tubes)	48 rxns
514174	NEXTflex-HT™ Barcodes 1-96 (in plates)	192 rxns
514175	NEXTflex-HT™ Barcodes 97-192 (in plates)	192 rxns
514176	NEXTflex-HT™ Barcodes 193-288 (in plates)	192 rxns
514177	NEXTflex-HT™ Barcodes 289-384 (in plates)	192 rxns