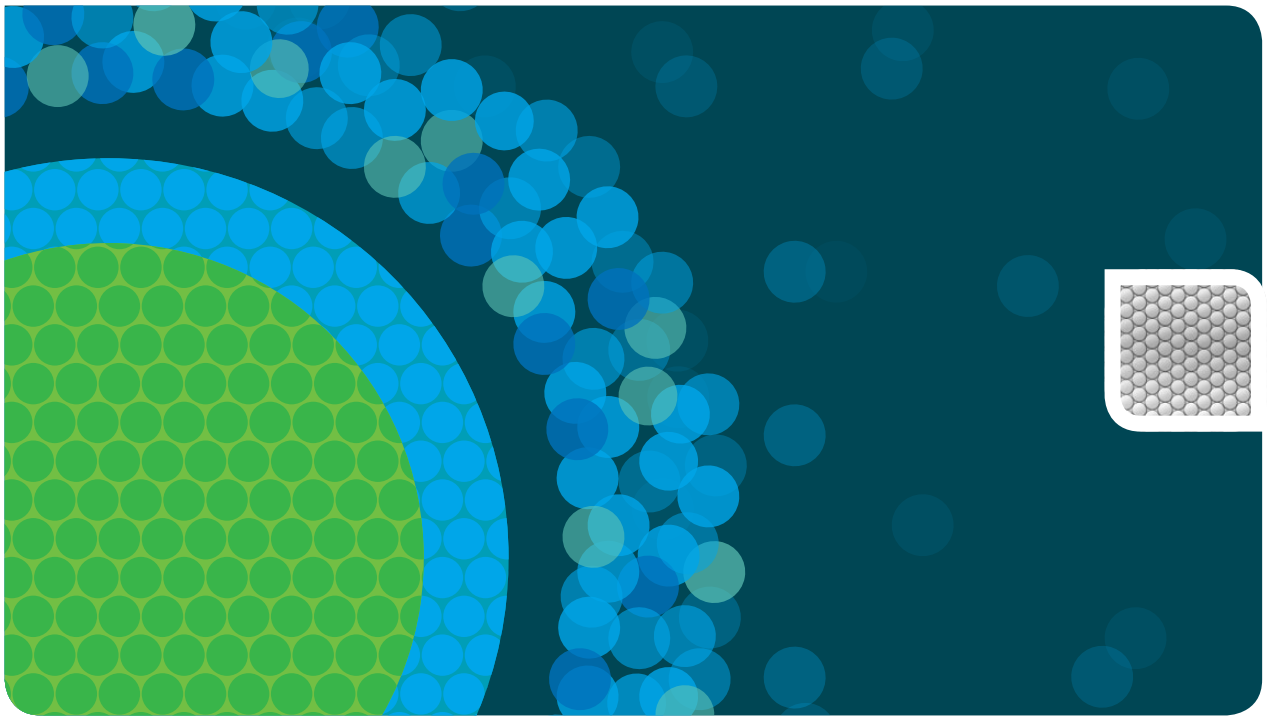

ddPCR™ Library Quantification Kit for Illumina TruSeq

The ddPCR library quantification kit provides absolute quantification of Illumina TruSeq libraries prior to next-generation sequencing (NGS). In combination with the QX100™ or QX200™ Droplet Digital PCR system, the ddPCR library quantification kit lets you:

- **Quantify your Illumina TruSeq library** — produces highly precise measurements without the use of standards
- **Visualize the quality of your TruSeq library** — highlights well- and poorly formed DNA fragments through ddPCR fluorescence amplitude plots. These quality metrics are not available when using other methods
- **Balance your sequencing libraries precisely** — enables consistent loading and efficient utilization of the sequencing capacity of Illumina NGS platforms

For more information, visit **www.bio-rad.com/web/ddPCRIlluminaTruSeq**.

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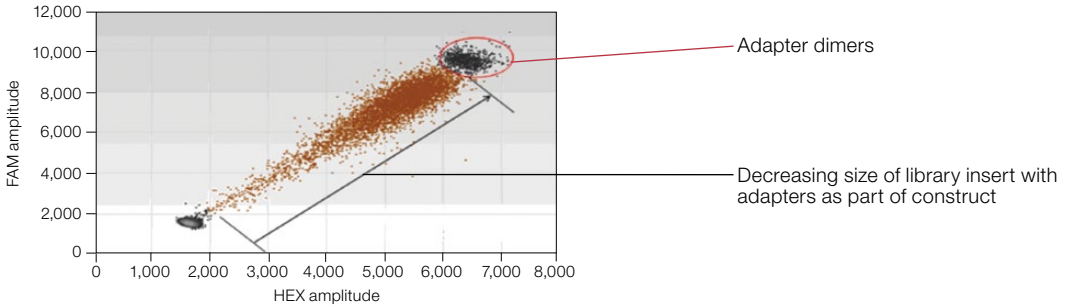
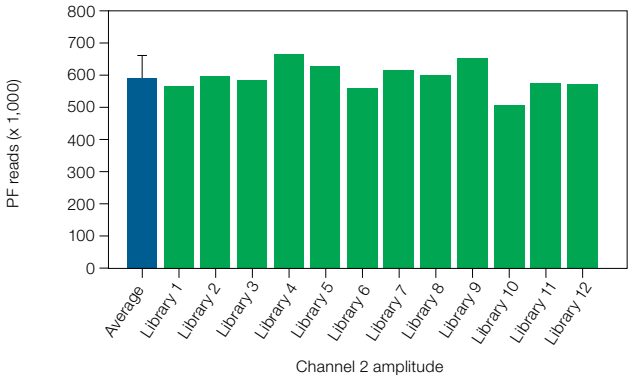


QX100 two-dimensional plot of FAM and HEX fluorescence amplitudes of the ddPCR library quantification kit assay. Demonstration of how the ddPCR assay is rich in additional information. Smaller insert species have more efficient ddPCR reactions in the droplets, giving an inverse correlation between insert size and fluorescence amplitude in the ddPCR assay.

Absolute Quantification, Quality, and Balance of Illumina TruSeq Libraries

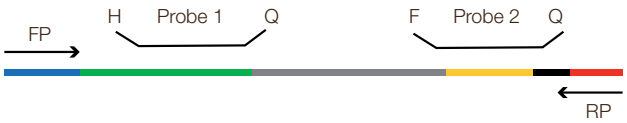
The kit contains hydrolysis probes for detection and absolute quantification of the P5 and P7 adapter sequences present in the TruSeq library in both properly and improperly formed library fragments. The combined signals from each probe are used as an indication of the formation of properly adapted library fragments as well as undesirable library products. These signals can be seen as double-positive clusters on the 2-D fluorescence amplitude plot in QuantaSoft™ software.



Balancing TruSeq libraries using the ddPCR library quantification kit assay. Twelve TruSeq libraries were quantified by ddPCR and balanced to be equimolar for the sequencing run. Excellent balancing within less than 15% difference was achieved between all 12 libraries pooled in the same sequencing run (total number of reads passing filter for each library). PF, passing filter.

The kit also enables the user to balance libraries for sequencing. Absolute quantification using the ddPCR library quantification kit is performed without the use of standards. In addition to accurate quantification, the data plots generated by the QX100 and QX200 systems are information rich and provide quality metrics of the library construction that are not available when using other methods.

The loading concentration and the quality of the prepared library are directly related to the number of reads and quality of sequencing data on the Illumina sequencing platform. The QX100 and QX200 systems complement Illumina sequencing platforms by enabling precise measurements to correlate loaded library concentration with cluster generation.



Design of the ddPCR library quantification kit assay. Bio-Rad's ddPCR library quantification kit contains an assay designed to span both the P5 and P7 adapter sequences, allowing for quantification of species possessing the correctly ligated adapter arms. FP, forward primer; RP, reverse primer.

Ordering Information

Catalog #	Description
186-3040	**ddPCR Library Quantification Kit for Illumina TruSeq**, 200 x 20 µl reactions, includes ddPCR supermix for probes (no dUTP) (2 x 1 ml vials), ddPCR library quantification assay (1 x 200 µl vial), for quantification of Illumina TruSeq libraries using the QX100 or QX200 system

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