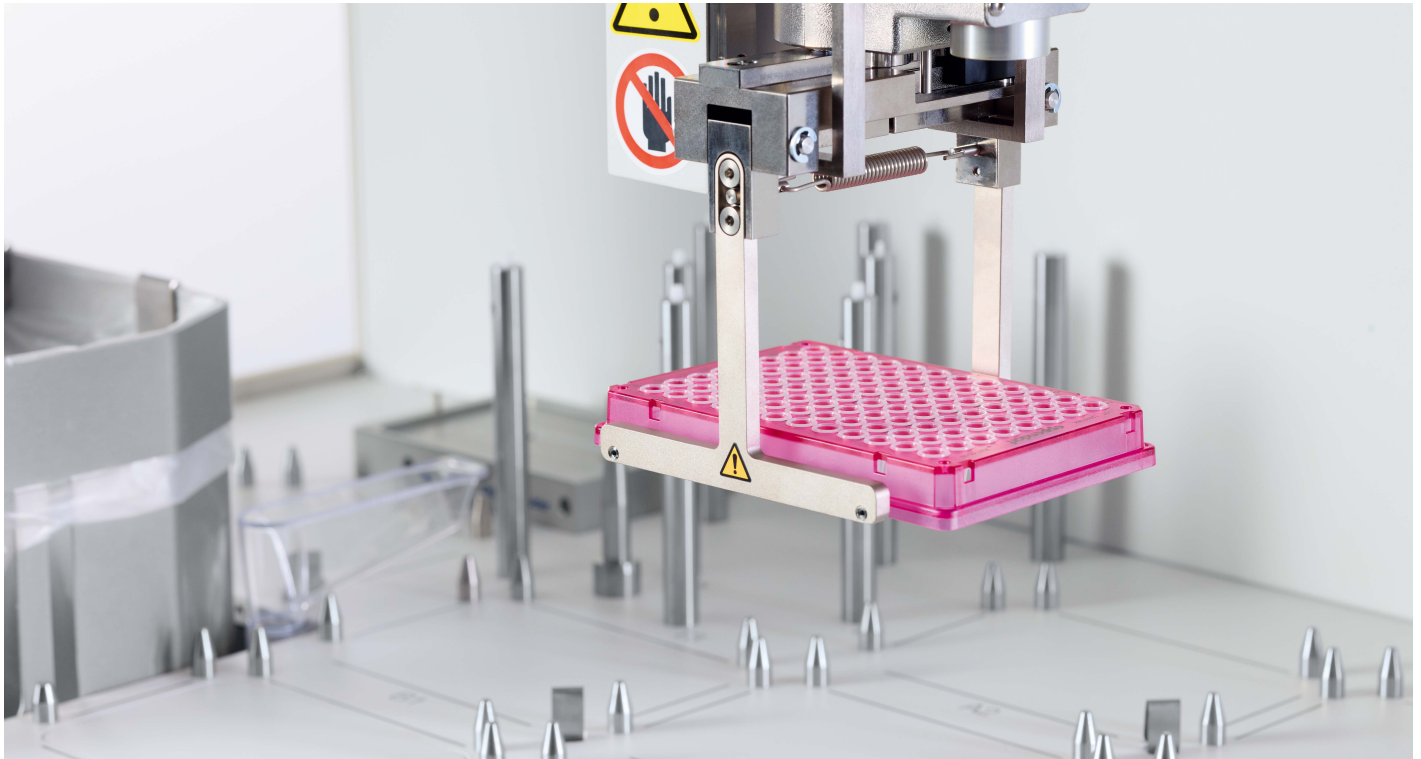


Fast and Flexible Library Preparation and Enrichment on the epMotion®*

Targeted Sequencing using the Illumina® DNA Prep Kit with Enrichment



Targeted sequencing enables researchers to study specific genes and parts of the genome relevant to their research. The Illumina® DNA Prep Kit with Enrichment is a targeted sequencing solution that can be used to generate high-quality enriched and indexed ready to sequence libraries. This kit can be easily automated on the epMotion® 5075t NGS Solution with pre-qualified methods to accelerate your research.

Product features of the epMotion®

- > 14.5 SLAS/ANSI (incl. TMX module) worktable positions
- > Automatic exchange of 4 dispensing tools
- > Maximum pipetting accuracy from 0.2 to 1,000µL
- > Optical sensor for detecting labware, liquids, tips
- > Integrated Eppendorf ThermoMixer® and up to 2 thermal modules for mixing and temperature control
- > UV lamp and air filter system option for decontamination and clean air conditions
- > Email notification and integrated LED lights for visual feedback on system status

Your advantages

- > **Walkaway automation:** Pre-qualified methods for on-bead tagmentation and hybridization steps reduce hands-on and processing times
- > **Better results:** Automated pipetting eliminates human error to generate high-quality enriched and indexed libraries ready for sequencing
- > **Increased throughput:** Up to 96 samples can be processed without compromising library quality
- > **Improved productivity:** Automatic dispensing tool exchange allows uninterrupted library prep and enrichment
- > **Greater flexibility:** Supports different tube and plate formats
- > **Enhanced safety:** Fully autoclavable dispensing tools, optional UV lamp and air filter to minimize cross-contamination and provide clean air conditions

Workflow Overview



Figure 1: Automated workflow for the Illumina® DNA Prep Kit with Enrichment on the epMotion® 5075t NGS Solution. Steps shown in brown can be automated on the epMotion®.

Protocol Overview

epMotion 5075t NGS Solution

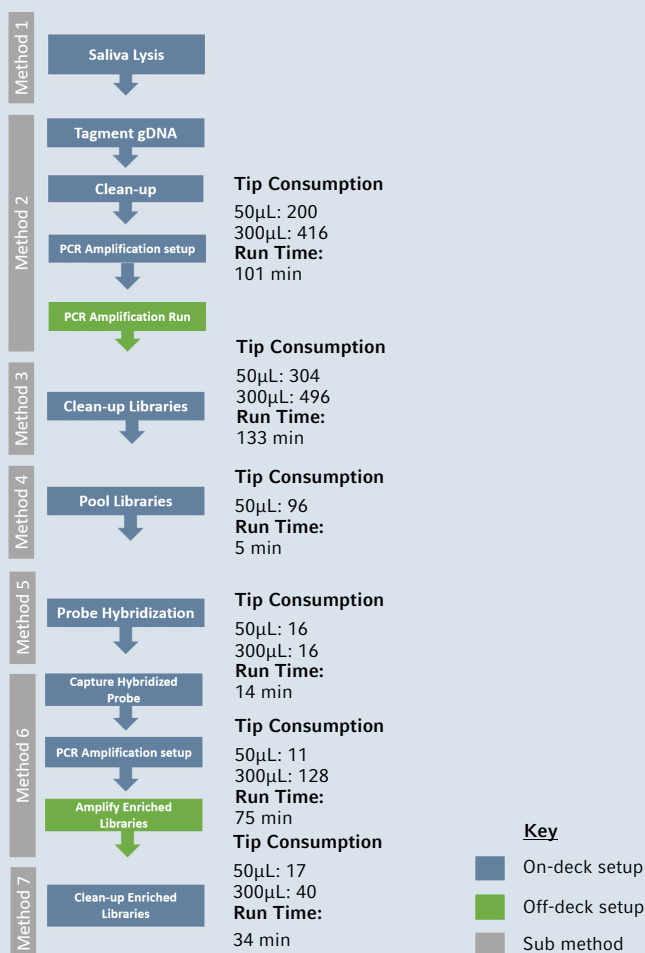
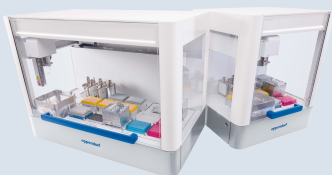


Figure 2: Overview of the sub-methods for the Illumina DNA Prep Kit with Enrichment on the epMotion® 5075t NGS Solution.

Worktable Configuration

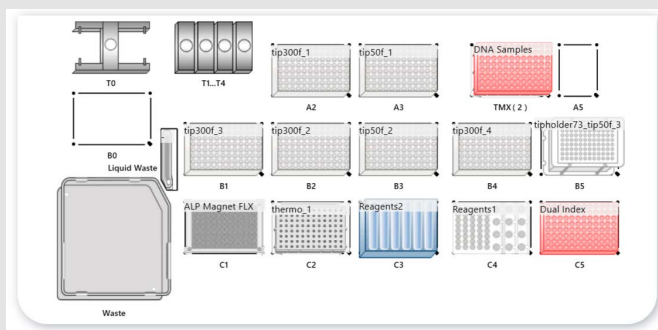


Figure 3: Worktable layout for processing Method 2 on the epMotion® 5075t NGS Solution.

Application Data

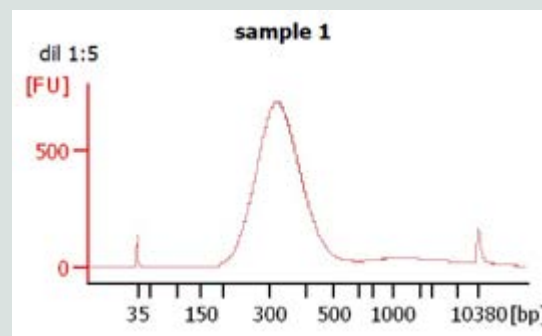


Figure 4: QC results of pre-enriched libraries using the Agilent BioAnalyzer.¹

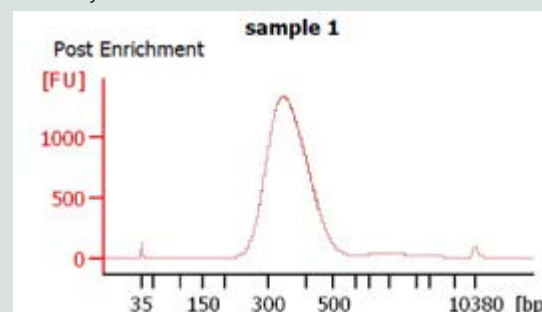


Figure 5: QC results of enriched libraries using the Agilent BioAnalyzer.¹

References

[1] Eppendorf Application Technologies, November 2019, NGS Libraries preparation on epMotion® Nextera™ Flex for Enrichment (Illumina®)

*Developed on a predecessor model, but thanks to the migration feature, this method can easily be transferred to the newest generation of epMotion®

Contact your sales specialist for more information: