

# 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 HEPA 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 HEPA 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®.

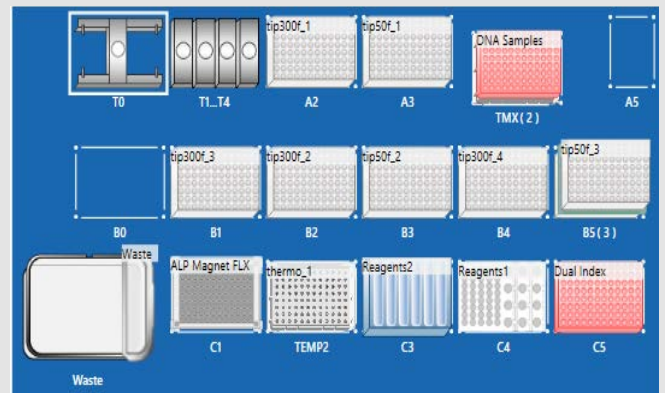
## Protocol Overview

### epMotion 5075t NGS Solution



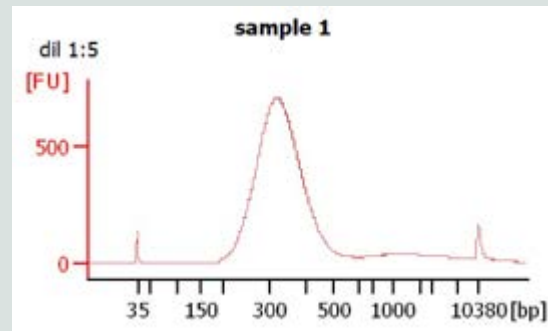
**Figure 2:** Overview of the sub-methods for the Illumina DNA Prep Kit with Enrichment on the epMotion® 5075t NGS Solution.

## Worktable Configuration

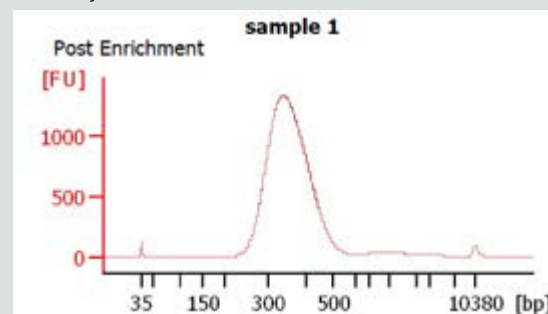


**Figure 3:** Worktable layout for processing Method 2 on the epMotion® 5075t NGS Solution.

## Application Data



**Figure 4:** QC results of pre-enriched libraries using the Agilent BioAnalyzer.<sup>1</sup>



**Figure 5:** QC results of enriched libraries using the Agilent BioAnalyzer.<sup>1</sup>

## References

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

Contact your sales specialist for more information: