



# NGS Made Easy

Optimize your NGS library preparation with the *epMotion*<sup>®</sup>  
Automated liquid handling system

# NGS Library Preparation Made Easy and Reliable



Next-generation sequencing sample preparation is a labor-intensive process, which requires experience, precision and accuracy to generate high-quality NGS libraries. The Eppendorf *epMotion*<sup>®</sup> can automate this pipetting-intensive protocol into a ready-to-run procedure with minimal user-interventions and setup time even for runs with low sample numbers. To minimize programming time and get you up and running quickly, Eppendorf provides pre-optimized and manufacturer-qualified NGS reagent kit methods that will result in reproducible preparation of high-quality NGS libraries. The sequencing results are comparable or better to those from manual preparation. Trust in the Eppendorf *epMotion* to automate your NGS library preparation and eliminate the risk of human pipetting errors, provide reproducible results and increase overall productivity.





## epMotion® 5075t NGS Solution Product Characteristic Overview

### Key highlights of epMotion 5075 NGS solution

- > Automating NGS library preparation eliminates the risk of human pipetting errors, provides reproducible results and increases productivity
- > The Eppendorf industry-proven, large repertoire of qualified NGS methods provides the generation of quality libraries
- > Very high pipetting accuracy (0.31% at 1  $\mu$ L) and precision (1.97 % at 1  $\mu$ L) combined with a minimum volume of 200 nL for accurate results and reagent savings
- > CleanCap option provides UV decontamination and HEPA air filter to protect samples from contamination
- > Intuitive software interface allows for ease-of-use and rapid method design while providing the needed flexibility to optimize even the most complex NGS workflows
- > 3D run simulation helps you optimize the speed and efficiency of new protocols
- > Capability for stacking plates and tip boxes maximizes available deck space and increases run times without user intervention
- > The integrated, high-performance Eppendorf ThermoMixer® and thermal elements allow for efficient mixing and reliable temperature control

### Specific benefits of the epMotion 5075 NGS solution

- > The epMotion 5075 NGS solution combines automated liquid handling and unique software features with the accessories and high-quality consumables you need for reliable NGS library preparation and maximum NGS kit flexibility
- > Automatic Tool Selection automatically decides which tools (single or 8-channel) to use for fastest run time – ideal when sample numbers change frequently or are not a multiple-of-8
- > Improved results due to unique options that help remove remaining liquid after washing steps more effectively to prevent carryover that could be detrimental to library prep
- > Email notification option keeps you informed about the status of your library prep run



# Great Flexibility for Your NGS Preparation Needs

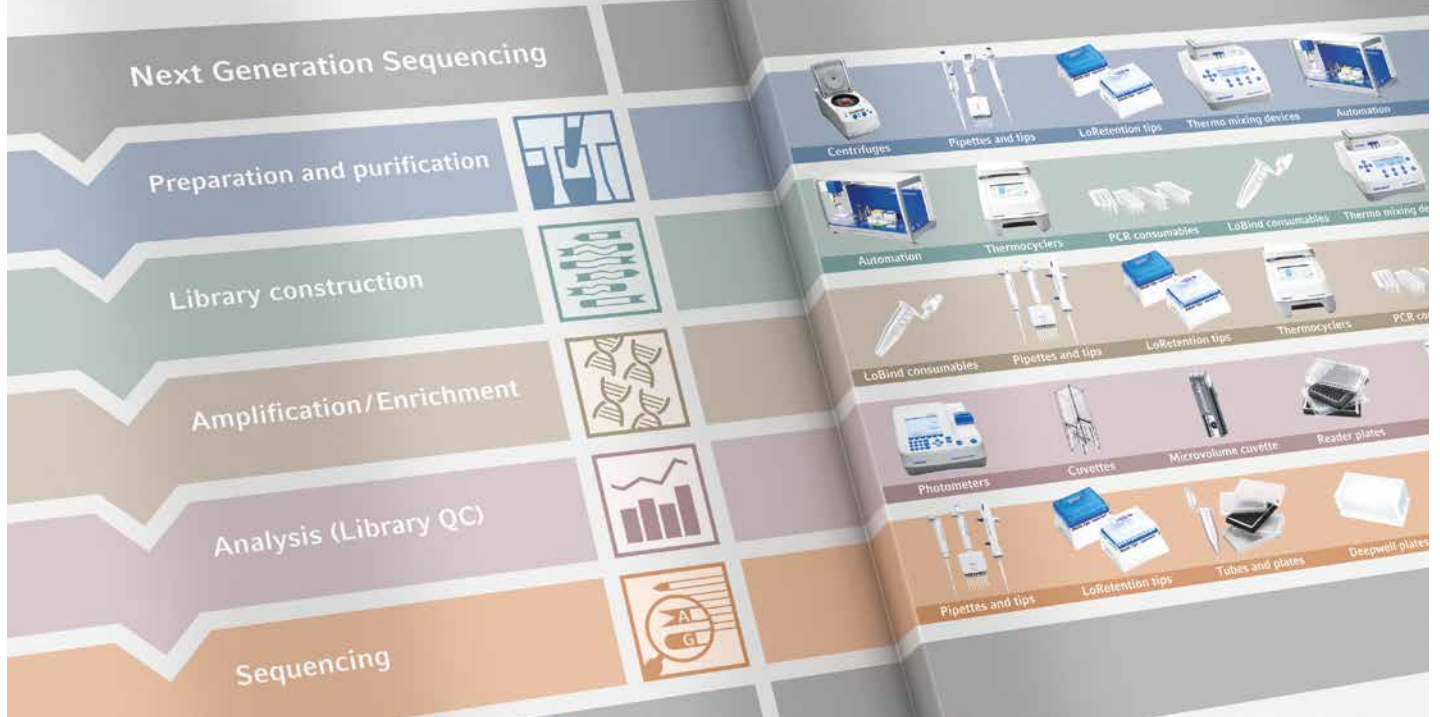
## Pre-optimized and qualified NGS library prep methods for use with epMotion automated liquid handling system

“Every successful sequencing run requires an equally successful preparation of DNA or RNA libraries. If one step goes wrong or is forgotten, the entire run is at risk.” (Illumina® Inc.)

The Eppendorf vast list of epMotion automated NGS sample prep methods has been qualified by kit manufacturers and customers to deliver sequencing results that are comparable or better to those from manual preparation. Combining a highly accurate pipetting system with unique operating features ensures the quality of the data generated by the methods meets or exceeds the stringent kit manufacturers’ qualification guidelines. This gives you peace of mind that the epMotion will reproducibly deliver high quality NGS libraries.

| NGS library prep kits on epMotion                                  |   |                                    |                    |
|--|---|------------------------------------|--------------------|
| Application  | Kit Name  | Qualification                      |                    |
| Whole-Genome Sequencing  | Illumina® TruSeq® Nano DNA                        | Illumina Qualified                 |                    |
|  | Illumina TruSeq DNA PCR-free                      | Illumina Qualified                 |                    |
|  | Illumina Nextera® XT DNA                          | Illumina Qualified                 |                    |
|  | Illumina Nextera DNA Flex                         | Illumina Qualified                 |                    |
|  | KAPA® BioSystems® KAPA HyperPrep DNA              | KAPA Qualified                     |                    |
|  | KAPA BioSystems KAPA HyperPlus                    | KAPA Qualified                     |                    |
|  | KAPA BioSystems KAPA HTP                          | Customer Qualified                 |                    |
|  | KAPA BioSystems KAPA LTP                          | Customer Qualified                 |                    |
|  | New England Biolabs® NEBNext® Ultra DNA           | Customer Qualified                 |                    |
|  | New England Biolabs NEBNext Ultra II DNA          | Customer Qualified                 |                    |
|  | Targeted DNA Resequencing                         | Illumina TruSeq Rapid Exome        | Illumina Qualified |
| Illumina TruSight® Tumor 15  |   | Illumina Qualified                 |                    |
| Illumina TruSeq Custom Amplicon Low Input                          |   | Illumina Qualified                 |                    |
| Illumina Nextera Rapid Capture Custom – Enrichment/TruSight Cancer |   | Illumina Qualified                 |                    |
| Illumina TruSight One Sequencing Panel                             |   | Customer Qualified                 |                    |
| Illumina ForenSeq™ DNA Signature                                   |   | Customer Qualified                 |                    |
| Illumina TruSight HLA Sequencing Panel v2                          |   | Illumina Qualified                 |                    |
| Illumina 16S Metagenomics  |   | Customer Qualified                 |                    |
| Agilent® Technologies® SureSelect® XT Target Enrichment            |   | Customer Qualified                 |                    |
| Agilent Technologies HaloPlex® Target Enrichment                   |   | Customer Qualified                 |                    |
| Qiagen® GeneRead™ Panel  |   | Customer Qualified                 |                    |
| Qiagen QIAseq FX DNA   |   | Customer Qualified                 |                    |
| Thermo Fisher Scientific® Ion AmpliSeq NGS Panels                  |   | Customer Qualified                 |                    |
| Total RNA Sequencing   |   | Illumina TruSeq Stranded Total RNA | Illumina Qualified |
|  |   | KAPA BioSystems KAPA HyperPrep RNA | Customer Qualified |
|  | KAPA BioSystems KAPA HyperPrep RNA with RiboErase | Customer Qualified                 |                    |
| mRNA Sequencing  | Illumina TruSeq Stranded mRNA                     | Illumina Qualified                 |                    |
|  | KAPA BioSystems KAPA HyperPrep mRNA               | Customer Qualified                 |                    |
| Targeted RNA Sequencing  | Illumina TruSeq RNA Access                        | Illumina Qualified                 |                    |
|  | Illumina TruSight RNA Pan-cancer Panel            | Illumina Qualified                 |                    |
|  | Illumina TruSight RNA Fusion Panel                | Illumina Qualified                 |                    |

> For an up-to-date list of qualified NGS methods and applications please visit [www.eppendorf.com/ngs-methods](http://www.eppendorf.com/ngs-methods).



**Our beneficial Eppendorf products for your NGS workflow:**



**Mastercycler® X50**

- > High speed PCR with up to 10°C/s heating rate
- > Advanced cycler-to-cycler networking capabilities
- > Consistent results due to excellent block homogeneity
- > flexlid® design minimizes evaporation and reduces edge effects to improve amplification specificity



**Eppendorf LoBind® Tubes and Plates**

- > DNA LoBind consumables increase quality and quantity of NGS libraries by preventing sample loss due to adsorption to the plastic surface
- > Maximize the recovery of nucleic acids during sample preparation/isolation and after incubation and long-term sample storage



**Eppendorf twin.tec® PCR Plates**

- > Highly uniform well geometry and rigid design makes twin.tec plates ideal for use with epMotion and highly compatible with PCR cyclers and magnets
- > Available as 96- and 384-well LoBind PCR plate to increase yield of transcript species in NGS library preparation

## Ordering information

| Description  | International Order no. | North America Order no. |
|--|-------------------------|-------------------------|
| <b>epMotion® 5075t NGS Solution</b> with MultiCon PC, Enhanced feature set 1, C2 thermo module, dispensing tools (TS 50, TM 50, TS 300, TM 300), waste bag holder plus NGS specific accessories (gripper with holder, thermoblock 96 OC, 2 x thermoadapter 96-well, Rack ILMN tubes, Reservoir Rack, Eppendorf Magnet Adapter FLX, Liquid Waste Tub 400 mL), plus NGS specific consumables (Eppendorf twin.tec® LoBind PCR Plate 96 semi-skirted, epT.I.P.S.® Motion pipette tips with filter PCR clean 50 µL & 300 µL each 960 tips, 30 mL reservoirs 50pcs, 50 waste bags) |                         |                         |
| <b>epMotion® 5075t NGS Solution</b> , 230 V / 50 Hz, EU plug   | 5075 000.962            |                         |
| <b>epMotion® 5075tc NGS Solution with CleanCap</b> , 230 V / 50 Hz, EU plug  | 5075 000.963            |                         |
| <b>epMotion® 5075t NGS Solution</b> , 100–240 V, 50/60 Hz, US plug   |                         | 5075000965              |
| <b>epMotion® 5075tc NGS Solution with CleanCap</b> , 100–240 V, 50/60 Hz, US plug  |                         | 5075000966              |
| <b>Recommended service options*</b>  |                         |                         |
| <b>epMotion® Installation</b>  | 0082 030.141            | 955989030               |
| <b>Installation Qualification &amp; Operational Qualification (IQ/OQ)</b>  | 0082 030.029            | 0082030029              |
| <b>epMotion® Training</b>  | 0082 030.155            | 955989040               |
| <b>Application-Implementation</b>  | On request              |                         |

\*Service products are available in selected countries only and service offer may differ.

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