

# Solutions for Your mAb Challenges

## EPENDORF CENTRIFUGES FOR THE THERAPEUTIC ANTIBODY DRUG DISCOVERY WORKFLOW

### Hit to Lead Discovery

#### PRODUCTION OF TARGET ANTIGEN

- Plasmid construction (small)
- Plasmid construction (large)
- Expression in bacteria or cell lines
- Lysate clarification
- Antigen concentration

#### GENERATION OF HITS & IDENTIFICATION

- Hybridoma technology
- FACS/Flow cytometry
- High throughput screening

#### CHARACTERIZATION OF HITS & SELECTION OF LEADS

- PBMC isolation
- Screening assay

### Lead Optimization

#### CHARACTERIZATION OF LEADS

- PBMC isolation
- Functional assays
- Sequencing (spin down)
- Sequencing (preparation)

#### PROTEIN ENGINEERING OF ANTIBODY LEADS

- Humanization (small)
- Humanization (large)

#### TRANSIENT ANTIBODY LEAD EXPRESSION

- Antibody expression in cell lines

### Candidate Validation

#### IN VITRO VALIDATION

- PBMC isolation
- Functional assays

#### CELL LINE DEVELOPMENT

- Establishment of stable cell line

Pre-Clinical Phase

#### ● MOLECULAR BIOLOGY SOLUTION

Centrifuge 5425  
+ Rotor FA-18x2-Kit



- Safe centrifugation with tube lid open: extended rim rotor
- Fast and easy operation: QuickLock® rotor, short key function, automatic lid opening
- Minimal noise pollution: optimized sound design

#### ● HIGH SPEED SOLUTION

Centrifuge 5910 Ri  
+ Rotor FA-6x50



- Fast and easy operation: QuickLock® rotor, favorites function accessible from home screen <3s, timer function
- Optimal cooling for sample safety: aluminum rotor, Dynamic Compressor Control cooling technology
- GxP documentation support: user management including run records

#### ● BIG VOLUME HARVESTING SOLUTION

Centrifuge 5910 Ri  
+ Rotor S-4xUniversal\*  
+ 4 x 1l adapter  
+ 4 x 1l bottle



- Great capacity and versatility: universal high capacity rotor
- Optimal cooling for sample safety: aluminum rotor, Dynamic Compressor Control cooling technology
- GxP documentation support: user management including run records

#### ● VERSATILITY SOLUTION

Centrifuge 5910 Ri  
+ Rotor S-4xUniversal\*  
+ 4 x 5/15/plate adapter  
+ 4 x 50/250/  
plate adapter



- Great versatility: universal rotor and adapters
- Optimal cooling for sample safety: Dynamic Compressor Control cooling technology
- Fast and reproducible operation: directly accessible programs via touch screen, optimized deceleration ramps

#### ● HIGH-THROUGHPUT SCREENING SOLUTION

Centrifuge 5920 R  
+ Rotor S-4-1000  
(plate/tube bucket)  
+ 4 x plate carrier



- Easy and safe plate handling: plate carrier, closed plate buckets
- Faster operation: FastTemp pro®

#### ● LOW-THROUGHPUT PLATE SOLUTION

Centrifuge 5430  
+ Rotor A-2-MTP



- Space saving: very small footprint
- Fast and reproducible parameter changes: 3 program buttons, rotary knobs
- Easy and safe operation: automatic lid opening

#### ● CLASSIC CELL CULTURE SOLUTION

Centrifuge 5810  
+ Rotor S-4-104\*  
+ 4 x 5/15 mL adapter  
+ 4 x 50 mL adapter



- Optimal size to capacity ratio: small footprint
- Optimal ergonomics with low access height and soft touch lid

#### CENTRIFUGE SERVICE

epServices

- Qualification Service: receive GxP standards & regulation compliant documentation for internal and external audits
- Preventive Maintenance: benefit from increased productivity and uptime
- Service Agreements: realize easy plannability with an agreement

\* Optional aerosol-tight rotor caps for biocontainment. Aerosol-tight caps offer additional safety when working with hazardous samples. They safely contain spilled liquid inside the rotor in case a tube leaks or breaks during centrifugation.