

## **LFB BIOMANUFACTURING,** YOUR PRIVILEGED CDMO PARTNER.

Global solutions, from development to commercial manufacturing of monoclonal antibodies and recombinant proteins.



**MORE THAN 25 YEARS OF EXPERIENCE IN** THE FIELD OF MONOCLONAL **ANTIBODIES AND** RECOMBINANT **PROTEINS** 



LFB BIOMANUFACTURING is a CDMO based in Alès (south of France) offering Bioproduction services :

- Cell line and process development
- Analytical services
- Scale up and GMP manufacturing







State of the art equipment and flexible facility (Single Use technologies) with a high level pharmaceutical regulatory status.

ANSM and FDA approved

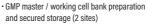


## **COMPREHENSIVE SERVICES OFFERING**



- CHO-S and glycosylation pattern enhancement (EMABling<sup>®</sup> platform)
- Expression vector construction
- Monoclonal antibodies
  chimerization / humanization
- Vector transfection and transient
  expression
- Cell line characterization and comparability
- Stable cell line generation and cloning

- Cell culture process development
- Media optimization / yield improvement
- · Downstream process development
- Scale down model for Upstream and Downstream process
- Quality by design (QbD) approach and critical parameters definition
- Analytical methods development
- Manufacturing of non-GMP batches up to 250L



- Manufacturing of GMP batches up to 1,000L (possibility to extend to 6 x 2,000L)
- · Analytical methods transfer and validation
- Quality control drug substance, drug product, in process control, raw materials testing
- Stability studies for drug substance and drug product
- · Process characterization and validation
- Regulatory support

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# ESCAPE<sup>30</sup> OUR NEW DEVELOPMENT STRATEGY



LFB BIOMANUFACTURING targets Excellence in Services as CDMO for monoclonal Antibodies and therapeutic Proteins in Europe by 2030; this will contribute to the national sovereignty in the field.





# SERVICE INNOVATION IMPACT

**Vision:** Top decile CDMO Services

#### Deliver value

2023 - 2025

- Execution edge
- · Strategic site investments
- Business development
  acceleration

#### LFB BIOMANUFACTURING building momentum

#### Strenghten position

2025 - 2028

- Customer portfolio
  excellence
- · New product introductions
- Strategic short-term partnerships

#### Expand service

2028 - 2030

- One-stop shop rearchitecture
- Additional therapeutic modalities
- Strategic long-term partnerships



# ANALYTICAL SERVICES



Our labs support development, technical transfer, optimization and validation of analytical methods as well as stability studies for clinical and commercial products.





### **PROCESS DEVELOPMENT & GMP CAPABILITIES**

#### - PILOT FACILITIES

- Mammalian cell line development
- Analytical method development
- Shake flask and Ambr<sup>™</sup> systems
- 25L Wave system

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- 50L & 200L Single Use Bioreactors
- Downstream process equipment (chromatography, ultrafiltration/diafiltration, nanofiltration)

#### GMP MANUFACTURING \_

- Production Unit 1 for early stage clinical manufacturing with - up to 1,000L single use bioreactor
- Production Unit 2 for late stage clinical and commercial manufacturing with evolutive capacity up to 6 x 2,000L
- Production Unit 3 dedicated to unconventional projects
- Industrial clarification/UF-DF/nanofiltration and chromatography systems



#### LFB BIOMANUFACTURING

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