ANTIBODY SCIENCE
RECOMBINANT PROTEINS
MOLECULAR BIOLOGY
CELLULAR ENGINEERING



## **BIOMANUFACTURING CUSTOM SERVICES**

More than 20 years of expertise and know how High quality, Reliability, Flexibility and Reactivity

Research Tax Credit Accreditation ISO 9001:2015 certification





### PLASMID DNA

- ✓ Production and purification, up to 500 mg
- ✓ R&D, "Endofree" and High Quality Grades (HQG)
- Quality controls & documentations adapted to your specifications



### MONOCLONAL ANTIBODIES

- Production and purification
- ✓ R&D, "Endofree" and High Quality Grades (HQG)
- Monitoring of concentration by FastELISA technology
- ✓ Mouse, Rat, Guinea Pigs and other species
- ✓ Antibody sequencing



#### RECOMBINANT ANTIBODIES

- ✓ Vector design and construction
- ✓ Transient transfection (CHO, HEK293, ...)
- ✓ Production by stable transfection: from a cell line or a stable pool of cells
- Chimeric, humanized, bi-specific, fragments, scFV, VHH...



#### RECOMBINANT PROTEINS

- In silico studies and custom construct design
- ✓ Different expression systems: E. coli, Cell Free, mammalian cells (CHO, HEK 293, ...)
- Purification (Affinity, IEC, SEC...) and quality controls

Production scales and Quality levels adapted to your applications

Up to several grams
For R&D, preclinical and clinical studies

RD-Biotech







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# RD-BIOTECH, EXPERTS AT YOUR SERVICE



#### **R&D CONTRACTS & BIOMANUFACTURING**

An Integrated Biotechnology Solution



#### MOLECULAR BIOLOGY

- Custom vector construction: In silico studies, custom design & cloning (mono and bi-cistronic, difficult constructs)
- ✓ Plasmid DNA production and purification, Research, "endofree" and High Quality grades
- ✓ Plasmid DNA linearization
- ✓ RNA preparation (in vitro transcription)
- ✓ Cell lines validation / Genotyping



#### **IMMUNOLOGY: Monoclonal & Recombinant Antibodies**

- Immunization and hybridoma development
- Ab engineering: Sequencing (VH/VL, HC/LC), chimerization, humanization, Isotype switching, reformatting (Fab, bi-specific, scFV, Fc Fusion...)
- ✓ Antibody characterization and validation (ELISA, Western blot, Cytometry, Octet, bioassays...)
- ✓ Phage display platforms (Mouse, Llama)
- ✓ Production, purification and quality controls



#### **CELLS AND RECOMBINANT PROTEINS**

- Custom process development in adapted expression systems
- In silico studies and feasibilty tests
- ✓ Pilot step for expression & purification process optimization
- Expression in E. Coli, mammalian cells (HEK, CHO...) and Cell Free system
- ✓ Stable cell line development by transfection
- Master and Working cell banks



#### ANALYTICAL SERVICES and BIOASSAYS

- Analytical method development: Immunoassays, ELISA, Luminex assays, PCR...
- Cell based assays
- ✓ Bioassays: ADCC, CDC, .. or custom development
- Quality controls: mycoplasma, endotoxins, bacterial contamination, ...



## FastELISA® KITS

- ✓ Human IgG, mouse IgG, rat IgG, bovine IgG quantification, Fc fragments
- ✓ Results in 30 minutes
- Mouse immunoglobulins isotyping
- ✓ Contaminant detection (Protein A, Host Cell Proteins)
- Ready-To-Use reagents (15 min of incubation)

The mAb≡xperts team







