

**MOLECULAR ENGINEERING
ANTIBODY SCIENCE
RECOMBINANT PROTEINS
CELLULAR ENGINEERING**

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

Research Tax Credit Accreditation
ISO 9001:2015 certification



BIOMANUFACTURING CUSTOM SERVICES



PLASMID DNA

- ✓ Production and purification, up to gram
- ✓ R&D, "Endofree" and High Quality Grades (HQG)
- ✓ GMP grade pDNA - up to 20 grams
- ✓ Quality controls & documentation adapted to your specifications



MONOCLONAL ANTIBODIES

- ✓ Production and purification, from 100 ml to 300 L of supernatant
- ✓ R&D, "Endofree" and High Quality Grades (HQG)
- ✓ Mouse, Rat and other species
- ✓ Monitoring of concentration by FastELISA technology
- ✓ Labelling and modifications



RECOMBINANT ANTIBODIES

- ✓ Antibody sequencing
- ✓ 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
- ✓ Custom construct design
- ✓ Multiexpression systems: *E. coli*, Cell Free, yeasts, mammalian cells (CHO, HEK 293, ...)
- ✓ Purification (Affinity, IEC, SEC...)

Production scales and Quality levels adapted to your applications

Up to several grams

For R&D, preclinical and clinical studies

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R&D CONTRACTS & BIOMANUFACTURING

An Integrated Biotechnology Solution



MOLECULAR ENGINEERING

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



IMMUNOLOGY: Monoclonal & Recombinant Antibodies

- ✓ Ab sequencing (VH/VL, HC/LC)
- ✓ Ab engineering: chimerization, humanization, Isotype switching, reformatting (Fab, bi-specific, scFV, Fc Fusion...)
- ✓ Antibody characterization and validation (ELISA, Western blot, Cytometry, Octet, bioassays...)
- ✓ *In vitro* production, purification and quality controls



CELLS AND RECOMBINANT PROTEINS

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



ANALYTICAL SERVICES and BIOASSAYS

- ✓ Analytical method development: Immunoassays, ELISA, PCR...
- ✓ LUMINEX platform
- ✓ 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, ...
- ✓ Mouse immunoglobulins isotyping
- ✓ Contaminant detection (Protein A, Host Cell Proteins)
- ✓ Results in 30 minutes
- ✓ Ready-To-Use reagents (15 min of incubation)

EXPLORE OUR CRO / CDMO CUSTOM SERVICES

