



**MICROGEM**

laboratory research

**SERVICES**

# RUNNING THE PROJECT

## **The method**

From sample preparation to bioinformatics data analysis. Microgem Lab offers you technical support and know-how for microarray and sequencing projects.

## **Feasibility Analysis**

A free consultation will be provided for project optimization (number of samples to be analyzed, methodology, costs).

## **Sample features**

The sample to be analyzed must meet integrity and purity requirements that must conform to the standards adopted in the Microgem Laboratory.

## **Quality Control**

After receiving the samples, our researchers will evaluate their integrity and purity. The results of this analysis will be sent to the researcher before proceeding with the next steps of the service.

## **Execution of the project**

Treatment of samples according to standardized procedures.

## **Data analysis**

Bioinformatics analysis is foreseen for each activity described (type of service). For the type of bioinformatics analysis see the specific service.

## SAMPLE PROCESSING

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- DNA Extraction
- RNA Extraction
- Real Time PCR

## MICROARRAY

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- Analysis of Gene Expression Profiles
- Analysis of miRNA Expression Profiles
- Analysis of DNA Methylation
- Analysis of Protein/DNA Interaction
- Comparative Genomics Analysis (CGH)

## DNA AND CLONING SERVICES

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- Custom Cloning
- SpeedySeq DNA Sequencing
- Custom Gene Synthesis
- Site Directed Mutagenesis

## PROTEIN EXPRESSION

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- Analysis of Protein Expression Profiles
- xMAP Technology and Multiplex Platform

## OLIGO SYNTHESIS

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- DNA Oligonucleotides
- RNA Oligonucleotides
- Probes for qPCR
- siRNA Oligonucleotides

- Plasmid Purification
- Primer Design & Synthesis
- Probe Design & Synthesis

## VIRAL PACKAGING SERVICES

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- Recombinant Lentivirus
- Adeno-Associated Virus (AAV)
- Recombinant Adenovirus
- Recombinant Retrovirus
- Custom HSV Viruses
- Custom Baculoviruses
- CRISPR Custom Targeted Lentiviral sgRNA Library
- sgRNA CRISPR Cas9 Vector Cloning

## CELLULAR SERVICES

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- IMPACT Contaminant Detection
- h-IMPACT Pathogen Testing
- Mycoplasma Detection & Decontamination
- Cell Immortalization
- Stable Cell Line Generation
- Custom iPSC Generation
- CRISPR Stable Knockout Cell Line
- Cell Line Authentication Service
- Gene Expression Assay Service
- Guaranteed CRISPR KO Cell Line Generation
- Cell Line Species Identification Service

## PROTEOMIC SERVICES

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- Custom Antibody - Mouse Monoclonal
- Custom Antibody - Rabbit Monoclonal
- Custom Antibody - Rabbit Polyclonal
- Custom Antibody - Additional Services
- Custom Peptide Synthesis
- Protein Production
- Protein/Antibody Conjugation

## PROTEIN SERVICE

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- Yeast Expression
- E.coli Expression

## POLYCLONAL ANTIBODY SERVICE

## PEPTIDE SERVICE

## GENE SYNTHESIS

## NEXT GENERATION SEQUENCING (NGS)

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- RNA Sequencing (RNA-Seq)
- Whole Genome Sequencing
- Exome Sequencing (Exome-Seq)
- Disease Panel and Pathway Genes
- Targeted RNA Cancer Panel
- Custom Targeted Sequencing
- Epigenetic Profiling
- Amplicon Sequencing
- Ultra Low Input Single Cell mRNA-Seq
- Low Input, Degraded or FFPE Total RNA Sequencing
- shRNA/sgRNA CRISPR Deconvolution Screening NGS
- De novo WGS Mate Pair Sequencing
- Circular RNA Sequencing
- Genome Methylation Sequencing
- 16S rRNA Amplicon Sequencing
- 16S rDNA Metagenome Sequencing
- Next Generation CRISPR Validation
- Full Length Plasmid Sequencing
- Lentivirus & Retrovirus Integration Site Sequencing
- Degraded RNA Sequencing



**NAPOLI**

Via Pisciarelli, 79 - 80078 - Pozzuoli (NA), Italia  
Tel.: +39.081.610.7435 - Fax: +39.081.610.7431

**MILANO**

Via Mauro Macchi, 8 - 20124 - Milano (MI), Italia  
Tel.: +39.02.3823.4211 - Fax +39.081.610.7431

ml@microgem.it  
**www.microgem.it**