



We further your research in screening, drug discovery and biomolecule characterization employing tools based in our proprietary microarray technology. We offer a variety full analytical services as well as development of customized tools suited to your specific needs.

Services

- **Immunoassay analysis of biological samples** such as serum, tear, milk, saliva and synovial fluid, for biomarker titration.
- **Miniaturization and custom development of immunoassays** for the analysis of sensitivity and specificity of antibodies, monitorization of serum concentration of biosimilar drugs, detection of specific humoral immune response, and identification of specific targets by direct and indirect methods [1, 2], with signal amplification, etc. These tests are quantitative thanks to the inclusion of calibration points in the microarrays used.
- **Pharmacodynamic analysis of molecules:** IMG Pharma offers pharmacodynamic analysis of molecules both through conventional techniques and through the use of its microarrays [3, 7-9], with customers being able, in the latter case, to purchase only the microarray, or request for the complete analysis service.
- **Lipidomic analysis:** the company offers the lipidomic analysis service using MALDI mass spectrometry, being able to determine the lipid composition and its variation in cell membranes of various organs, tissues and cell lines, for different purposes: search for biomarkers, comparison between treatments, etc. This service includes both obtaining experimental data and statistical analysis, in which IMG Pharma has a depth expertise [4-6]. In this context, the ONCOFINDER platform [10] is specially designed for a rapid screening of melanoma using a collection of membrane phospholipids.
- **Functionalization of surfaces and sensors** through patented technology [7], according to customer needs.
- **Big Data analysis** by means of multivariate statics, machine learning and artificial intelligence proprietary algorithms, applied to predictive model generation, classification and stratification with diagnostic and prognostic purposes and biochemical knowledge discovery.

Products

Cell membrane microarrays: made up of multiple microdots with cell membranes from different organs and tissues of experimental animals. These microarrays allow, in a single miniaturized assay, to determine the distribution profile of drugs and drug candidates, making it possible to identify the organs on which they act, and therefore to anticipate potential adverse effects that they may produce “in vivo”. This technology therefore represents savings in time, reagents, experimental animals and polluting waste. IMG PHARMA easily adapts the design and composition of these microarrays customizing them to the specific needs of each client, adding samples, internal controls, etc.



- **HUMA-CHIP**

- A collection of cell membranes from 11 human tissues.
- Format: 26 x 76 mm glass slide containing 4 identical microarrays, composed of a collection of membranes isolated from 11 tissues of 3 male human subjects

- **CYMO-CHIP**

- A collection of cell membranes from 20 tissues from male Macaca Fascicularis primates.
- Format: 26 x 76 mm glass slide containing 4 identical microarrays, composed of a collection of membranes isolated from 20 tissues of 3 male Macaca Fascicularis primate.

- **SPRA-CHIP**

- A collection of cell membranes from 20 tissues from male or female Sprague Dawley rats.
- Format: 26 x 76 mm glass slide containing 4 identical microarrays, composed of a collection of membranes isolated from 20 tissues of 5 male Sprague Dawley rat

- **PD-CHIP**

- A collection of brain areas from control and a model of Parkinson's disease (MPTP treated Macaca fascicularis primate).
- Format: 26 x 76 mm glass slide. Contact us to obtain a detailed list of available tissues/organs.

- **ONCO-CHIP**

- A collection of human cell membranes isolated from primary cells, tumor cell lines and biopsies.
- Format: 26 x 76 mm glass slide. Contact us to obtain a detailed list of available tissues and cell lines.

REFERENCES

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