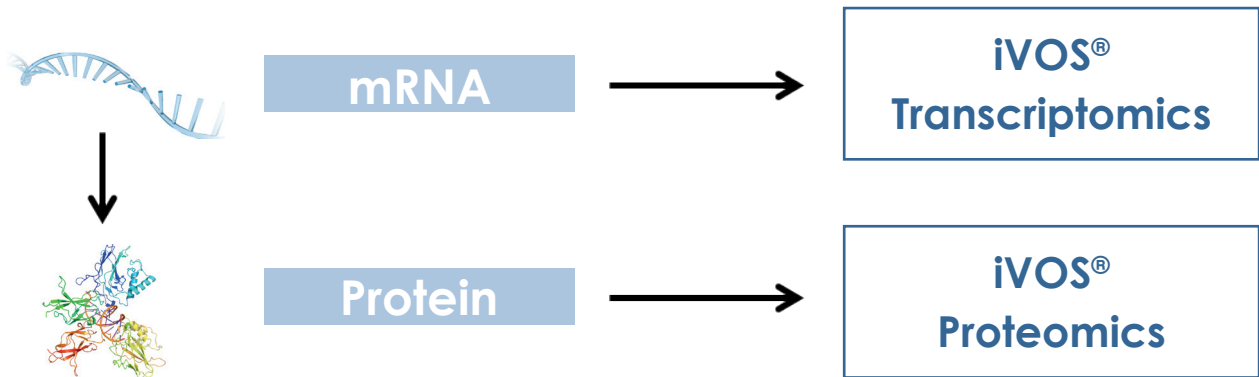


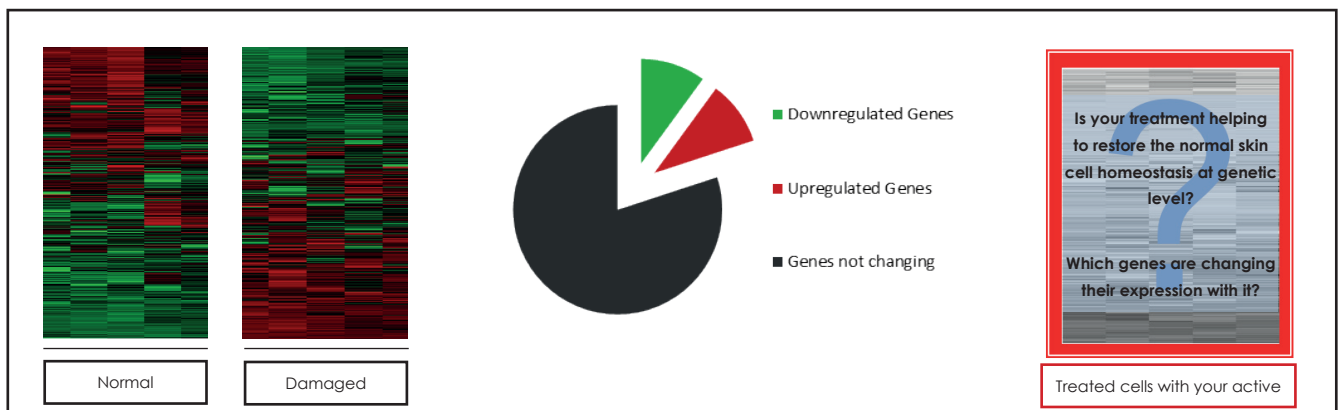
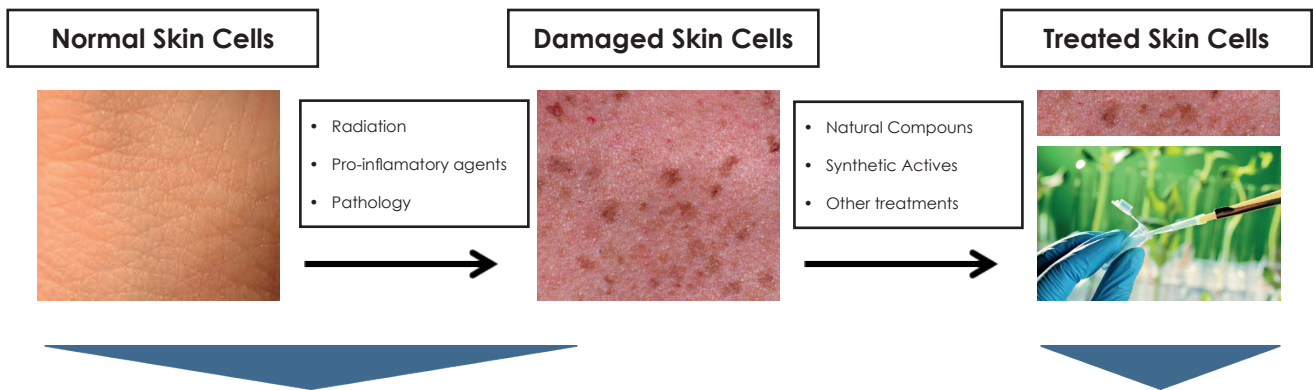
The innoHealth & Vivacell Omics Service (iVOS®) is a revolutionary platform focused on studying the effect of a treatment over skin cells using different omics approaches. Both transcriptomics and proteomics are widely used techniques in basic research on multiple fields. iVOS® platform does not only provide the experimental structure needed to carry out these studies, but also processes the results through the use of **bioinformatics**.



The iVOS® service provides the most complete ingredient characterization on the dermocosmetic and nutraceutical areas

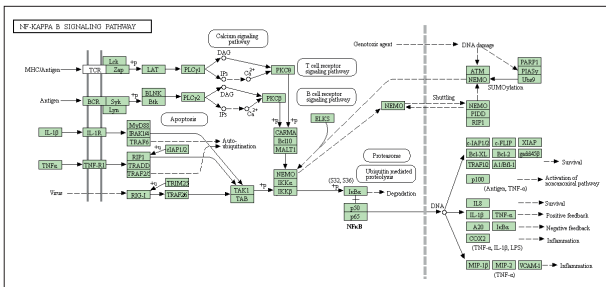
## iVOS® Transcriptomics

The iVOS® Transcriptomic Profiling Service allows us to evaluate the expression level of **10.000 - 14.000** genes in one assay. Using RNA-Seq, we measure the **mRNA** levels, the biomolecule responsible for transmitting the information stored in genes.



# iVOS® Proteomics

The **iVOS® Proteomic Profiling Service** is an equivalent to the iVOS® Transcriptomic Profiling Service, but destined to those clients who want to characterize their treatment at **protein** expression level. In this service, we create a profile that can vary between **1.000 - 4.000** proteins, depending on the selected cells and conditions.



## Proteomics: A step closer to the final biological effect

The proteins are the effector molecules of the cell. The proteomic assay provides information about the final and processed proteins that are mediating a biological response. It offers a complementary insight into the biological effect produced by the treatment of interest when carried out in combination with the transcriptomic profiling service.

# iVOS® Full - Omics

## iVOS® Full-Omics

**iVOS®  
Transcriptomics**

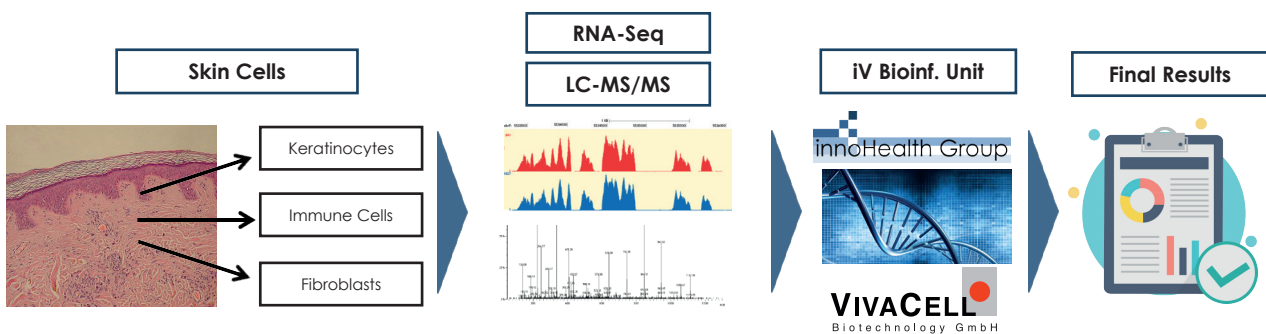


**iVOS®  
Proteomics**

The **iVOS® Full-Omics Service** is the most complete service of the platform. After carrying out both assays, our **Bioinformatics Unit** integrates all the results in a final analysis that contains the full characterization of the treatment.

## Technical information: How can we do it?

To perform the assays, the **skin cells** of interest are cultured and treated in the agreed conditions. Then, the **mRNA** and **proteins** are extracted and analyzed using **RNA-Seq** and **LC-MS/MS**, respectively. Then, the primary results are processed by the **innoHealth & Vivacell Bioinformatics Unit**, creating a **comprehensive report** that contains biological pathways affected by the test ingredients.



## Technical information: Why you should use bioinformatics



The **innoHealth & Vivacell Bioinformatics Unit** is a key feature in this platform, allowing us to process and analyze the massive amount of data generated by these techniques. The unit transforms the data into interpretable biological and statistical information that let us exploring the results using a “Top-Down” approach. We use a combination of *in-house* scripts and third party resources to assess the different **points** of our bioinformatic analysis.

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*Service provided by collaboration between Vivacell and innoHealth*