NEWS:

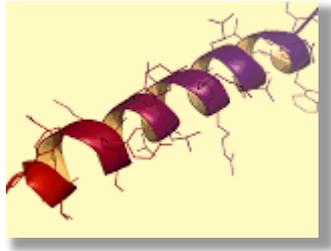## Understanding antimicrobial peptides actions on Ectodermal Dysplasia patients skin with label-free nanoLC-MS/MS quantitative proteomics

Peptides processed from the dermcidin precursor are the most abundant AMPs in eccrine sweat with a broad spectrum of antimicrobial activity.

In the present study (1), a label-free quantitative proteomic approach was used to determine the relative abundance of proteins present on the skin secretome of healthy individuals and ED patients.
A comprehensive protein profile composed of proteins related to cellular processes was obtained, such as immunity and host defense in healthy individuals and metabolic/catabolic and biosynthetic processes.

This leads to a more complete understanding of the pathology of the disease,and is powerful to develop new therapeutic options, or test an active effect.

Interestingly, this study can be completed with the inclusion of microbiota, to understand also the effects on it (2).

(1) Quantitative proteomics of the human skin secretome reveal a reduction in immune defense mediators in ectodermal dysplasia patients. Burian M, and all. 2015 J Invest Dermatol. 2015 Mar;135(3):759-67
https://www.ncbi.nlm.nih.gov/pubmed/25347115

(2) Grassl N, 2016. Ultra-deep and quantitative saliva proteome reveals dynamics of the oral microbiome. Genome Med. 2016 Apr 21;8(1):44
http://www.ncbi.nlm.nih.gov/pubmed/27102203

With MS-Phylogene, you can also characterize your product effects on skin and microbiota:

- *High-resolution nano LC-MS/MS quantitative proteomics and data processing: The efficient tool.*
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- *Bacterial 16s rDNA and fungal ITS sequencing with OTU-based estimation to investigate microbial communities diversity and determine taxonomic composition*

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