

OMIC ENGINE



About

OMIC-Engine MBG is one of the four main hubs of the Research Infrastructure **OMIC-Engine**.

Among the main OMIC-engine research directions are:

- Omic analyses towards the understanding of product properties.
- Development of biosensors for the effective detection of microorganisms.
- Design and generation of specially cells with specific functions
- Design and generation of programmed organisms with special functions



Services

The research infrastructure of the OMIC-engine MBG hub has been largely funded by EU and National Competitive programs.

The expertise of the MBG hub covers a wide range of methodologies of Molecular Biosciences and offers to academic and industrial users, from Greece or neighbouring countries, access to technologies and services:

- DNA analysis and molecular identification of species/varieties in agricultural production.
- Analysis of food quality characteristics (microbiological control, pathogen control, acidity, sugars, organic fatty acids and alcohols, volatile compounds in food, etc.).
- Antimicrobial activity of natural products for use as bio-preservatives in foodstuffs.
- Design and development of functional foods using probiotic microbial strains

In the context of implementation of the OMIC-ENGINE Research Infrastructure funded by the Greek General Secretariat for Research and Technology, the OMIC-engine-MBG hub acquired a midsize **Next Generation Sequencing platform (Thermo S5)** which greatly enhances its research potential by introducing a range of targeted, microbial and transcriptomic NGS applications. OMIC-Engine MBG hub is currently developing **NGS based technologies** and services:

- Microbiome analysis in various samples.
- Monitoring of the resistance of insects to insecticides
- Molecular profiling.

People



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