

Feed Additives | Enzymes | Food Microbes
Plant Protection Products (Biopesticides) | Food Contact Materials

Biosafe laboratory services for different product types

| | | Viable Microorganisms | Fermentation Products | Food Contact Materials |
|--|---|-----------------------|-----------------------|------------------------|
| Taxonomic identification | WGS (Whole genome sequencing) + bioinformatic analysis | x | x | |
| | 16S rRNA sequencing | x | x | |
| Antimicrobial resistance genes from WGS | | x | x | |
| Antimicrobial susceptibility (MIC test) | | x | x | |
| Antimicrobial production | | x | x | |
| Description of genetic modification | | x | x | |
| Toxicity and pathogenicity | WGS analysis, toxins and virulence factors | x | x | |
| | Cytotoxicity: ISO 10993-5; qualitative and quantitative cytotoxicity, Bacillus cytotoxicity using Vero cells, EROD assay, Boar spermatozoan motility inhibition test, RNA inhibition test | x | x | x |
| | Genotoxicity: Bacterial reverse mutation test OECD 471, In vitro mammalian cell micronucleus test OECD 487 | x | x | x |
| | Endocrine disruptor tests (estrogen) | | | x |
| Absence of the production strain from the product | | | x | |
| Presence of DNA in the product | | | x | |
| Compatibility with other authorised additives, in vitro | | x | x | |
| Impact on gut microbiota (sequencing and bioinformatic analysis) | | x | x | |
| Allergenicity (protein sequence analysis + literature) | | | x | |
| Genetic stability (RAPD, PFGE) | | x | | |

Biosafe consulting services

- Literature reviews, consultations and statements
- Data interpretation
- Analyses of results and conclusions on customer data
- Presentation of findings in the form required by the authorities
- Biosafe Academy – training professionals for the development of safe products