

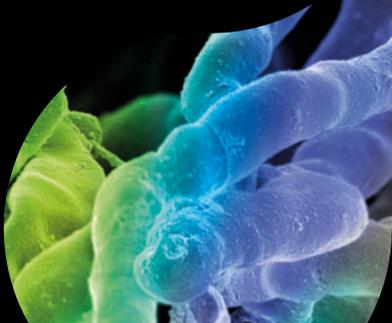
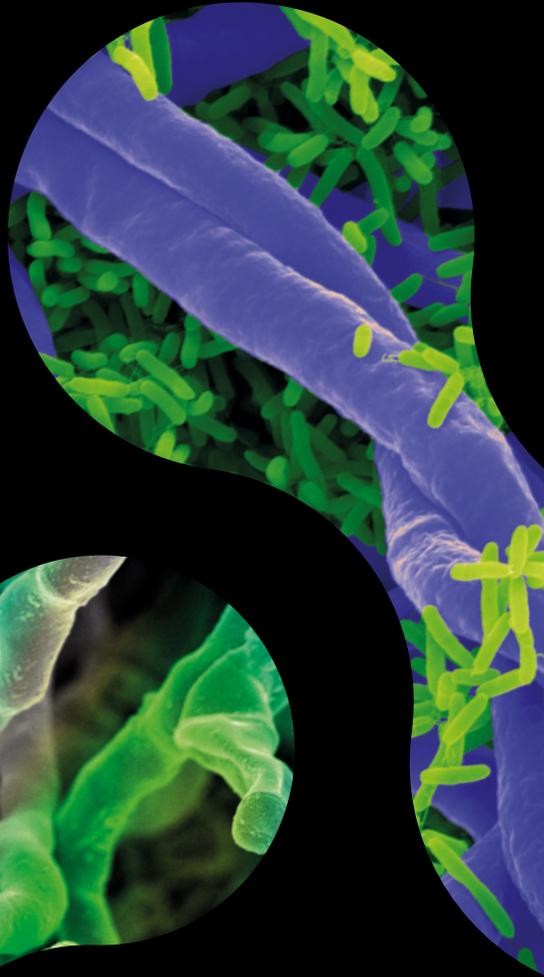


# NUMINOUS

microbials

## FROM MICROBIAL NATURAL POWER TO SUSTAINABLE BIOTECH SOLUTIONS.

Scalable, sustainable  
biotech solutions inspired  
by nature and powered  
by microorganisms.



**Numinous Microbials GmbH**  
**Corporate Presentation**

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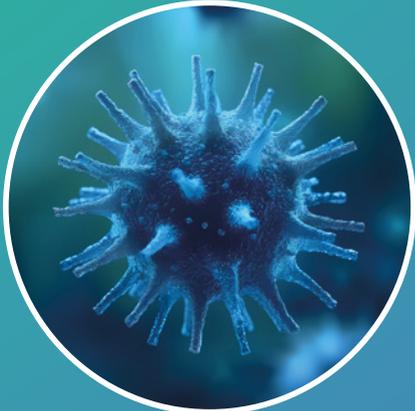
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# NUMINOUS MICROBIALS

## WE UNLOCK THE FULL POTENTIAL OF MICROBIAL TECHNOLOGY - FROM LAB TO MARKET.

**“If you don’t like bacteria, you’re on the wrong planet.”**

Stewart Brand, Whole Earth Discipline, 2009

**Numinous Microbials** is a **science-driven biotech** dedicated to research, development, production and marketing of **microbial-based solutions**.

Combining **proprietary microbial innovations, tailor-made R&D services and manufacturing capacity**, we partner with academia and industries at every stage of the path to market to innovate, scale, and lead with sustainable solutions.

From living-cells to product authorizations, our **one-stop microbial innovation platforms** accelerate the **discovery, development and delivery** of microbial products **faster** than ever before.

For billions of years, microorganisms have shaped ecosystems - recycling nutrients, producing oxygen, and driving life with zero waste.

Today, at **Numinous Microbials** we apply these natural processes and strengths to manufacture high-value solutions at scale using renewable feedstocks, less water, less land, no toxic substances and lower energy inputs than conventional synthetic methods. The result is cleaner innovative productions with reduced costs, zero waste, smaller environmental footprints, and greater scalability.

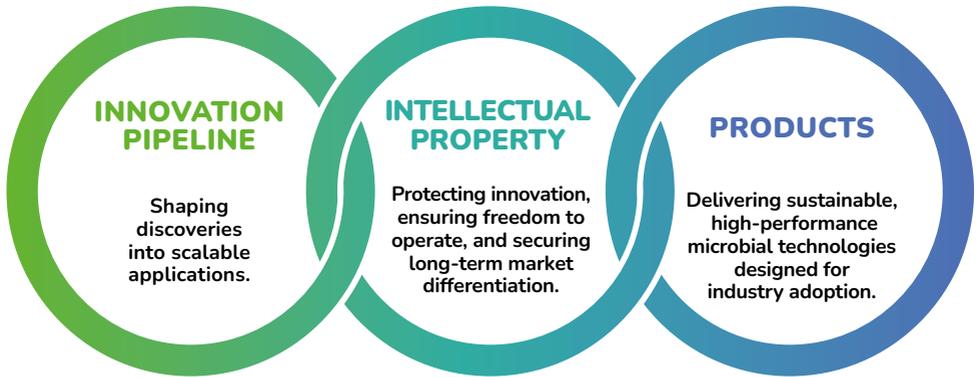
**Microorganisms are our powerful partners in designing smarter, more sustainable and innovative products that are inspired by Nature.**



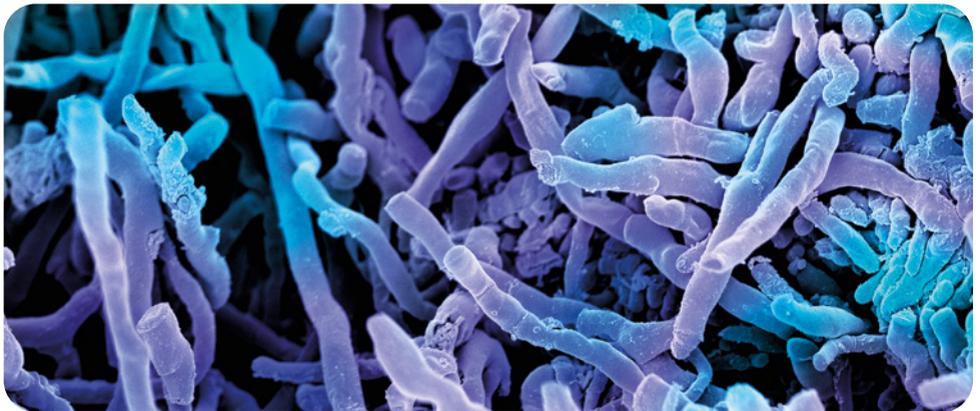
## OUR SOLUTIONS

From innovation pipeline to IP and products, at **Numinous Microbials**, we transform microbial diversity into **sustainable and high-performance microbial biotechnology solutions**. Built on our proprietary R&D platform, our products go beyond the lab to deliver **real-world applications** across **agriculture, food & feed, pharmaceuticals, cosmetics, households, industrial processes, and research**. We integrate **science, industry, and IP strategy** to ensure that every solution is validated, scalable, and market-ready.

**Our approach combines three interconnected strands that accelerate microbial discoveries into industry-ready innovations:**



This integration ensures that each outcome is not stand-alone but part of a connected pathway - **from discovery to validated products, with IP protection and scalability embedded from the start.**



## Key advantages of our solutions:



**STRONG IP PROTECTION  
AND DIFFERENTIATION.**



**SCALABILITY  
AND COMPLIANCE  
INTEGRATED EARLY.**



**LICENSING AND  
PARTNERSHIP OPPORTUNITIES  
AT EVERY STAGE.**



**FASTER TIME-TO-MARKET  
WITH REDUCED RISKS.**

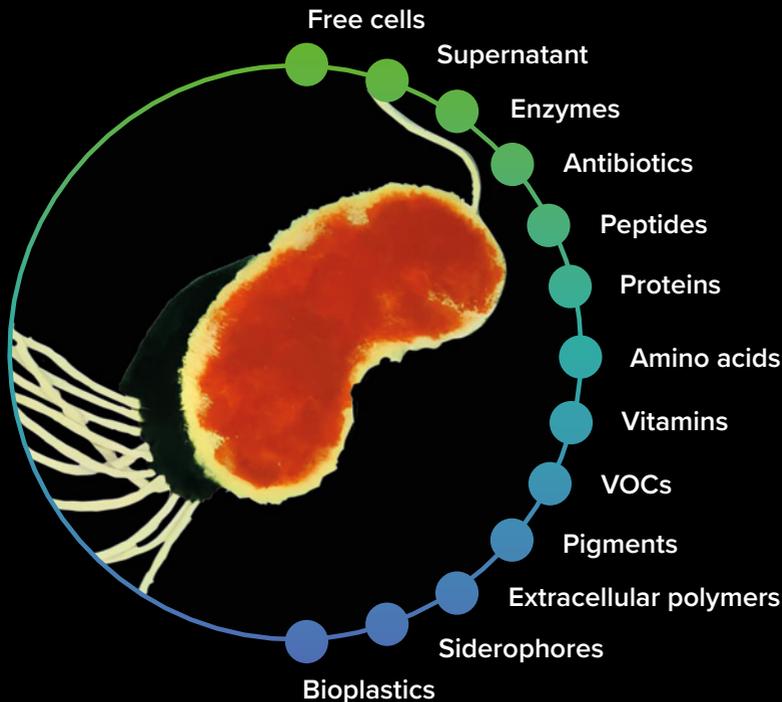


**CONTINUOUS FLOW FROM  
DISCOVERY TO PRODUCT.**



**PROVEN SAFETY  
AND REGULATORY  
ALIGNMENT.**

## ONE CELL, ENDLESS SOLUTIONS!



# OUR JOURNEY



Isolation and sourcing

Initial screening for traits and efficacy

Characterization

DNA barcoding

Whole Genome Sequencing

Proteomics and metabolomics

Potential application identification

Media optimization

Upstream process  
development

Downstream  
process  
optimization

Formulation  
stability studies

Actives  
scale up

Active  
substance

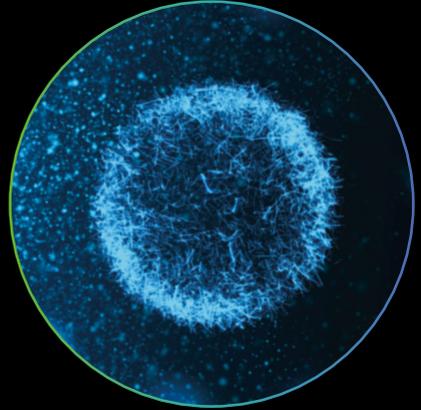




## **PARTNER WITH US ACROSS OUR JOURNEY**

From discovery to validated products, Numinous Microbials is your partner in open, collaborative microbial innovation.

**Whether you seek to co-develop, license, or adopt microbial biotechnology solutions, our integrated pathway ensures faster, safer, and market-ready outcomes.**



**Real world testing  
formula optimization**

**Formulation  
scale up**

**Product data package  
and dossier submission**

**Active  
substance  
data package  
and dossiers  
submission**

**Active  
authorization**

**Product  
authorization**

**MARKET**

**Formulated  
product**

## WHAT WE DO

At Numinous Microbials, innovation is powered by three integrated pillars - **Proprietary R&D**, **Research Molecules**, and **CRDMO Services**. Together, they create a connected pathway that transforms **microbial discoveries** into **proven, scalable, and market-ready biotech products**.



### Proprietary R&D Microbial Discovery & Development

We develop novel microbial strains and bio-based products, delivering scalable, IP-protected, and sustainable solutions with strong performance, proven safety, and industry-specific impact.

### Research Molecules Strategic Enablers for Validation & Scale-Up

We supply high-purity microbial-derived compounds that enable accurate, reproducible research and accelerate the transition from early-stage discovery to commercial applications across agriculture, pharmaceuticals, and other innovation-driven sectors.

### CRDMO Services End-to-End Microbial Product Development

We provide end-to-end CRDMO support for microbial products - from discovery to GMP manufacturing - with tailored collaborations that ensure quality, compliance, and faster market entry while minimizing risks and costs.

Each platform strengthens the others:

- **R&D discovers** strains, compounds, and formulations.
- **Research Molecules validate** reproducibility, safety and compliance.
- **CRDMO Services scale** validated discoveries market-ready products.

This connected pathway ensures **high-potential microorganisms** are not only **discovered** but also **validated** and **delivered** with **scientific rigor, speed**, and **full regulatory compliance**.

## WHY PARTNER WITH US

Collaboration is at the core of everything we do. We combine open innovation, shared IP, and strategic partnerships with academia and industry to accelerate the development of microbial solutions.

**By integrating our proprietary R&D platforms with the multi-domain expertise of the Numinous Microbials group and a global ISO and GMP manufacturing network,** we design microbial products and processes tailored to the needs of agriculture, pharma, cosmetics, households, industrial processes, and research applications, delivering reliable scale-up, full regulatory compliance, and market-ready solutions.



### Access proven Numinous Microbials biotechnology platforms

backed by science and IP, creating solutions competitors cannot easily replicate.



### Expand capabilities without overhead

by leveraging our R&D, manufacturing, and regulatory expertise.



### Accelerate innovation, reduce costs and risks

through integrated CRDMO services.



### Scale quickly and reliably

via our global GMP/ISO facilities network, delivering efficiency, compliance, performance, and secure supply.



### Deliver tailored microbial solutions

highly effective, sustainable, and customized for specific industry needs.

## Open Innovation, Shared Impact

We believe the future of microbial biotechnology lies in collaboration. That's why our model is open, flexible, and built for shared value creation.

**Co-develop projects** with academia, industry and startups.

**License in technologies** that strengthen our pipeline.

**License out proprietary strains, molecules, processes, and dossiers** to industrial partners.

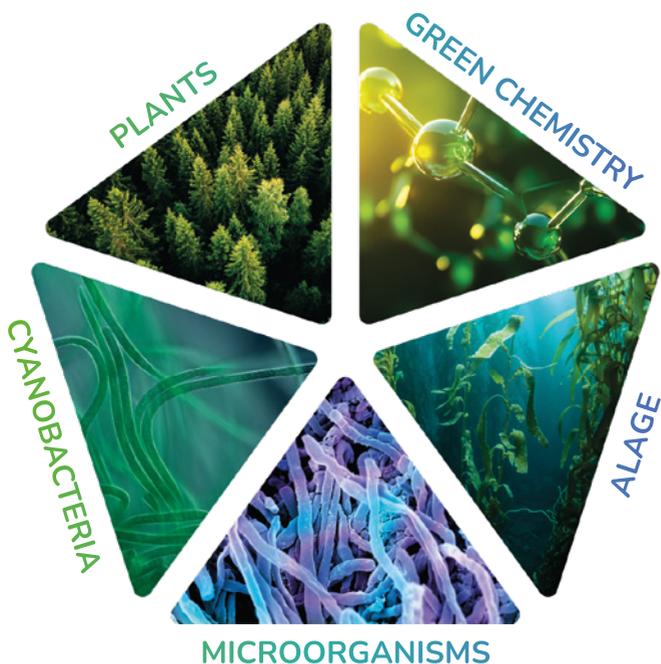
**Partner for scale-up and commercialization** across global markets.

## OUR GROUP

Numinous Microbials is part of the broader ecosystem of the biotech group **Numinous**. Together, we reinforce our scientific foundation, provide long-term financial strength, and expand our global reach — creating **powerful synergies** that connect **research, innovation, and commercialization**.



**Numinous** is a nature-inspired biotech group advancing innovation in **microorganisms, cyanobacteria, algae, plants, and green chemistry** fields. Through integrated R&D pipelines and advanced CRDMO platforms, Numinous develops scalable, sustainable technologies serving agriculture, food & feed, cosmetics, pharma, household, and research industries. By combining multi-domain expertise with strong intellectual property and a collaborative international model, Numinous transforms biological resources into high-value solutions with global impact.



[numinous.bio](https://numinous.bio)

# OUR MARKETS

Agriculture



Food & Beverages



Pharma & Human Health



Industrial processes



Research



Household



Cosmetics



Feed & Animal Health



**numinous**  
microbials



numinous  
microbials



SCAN ME



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