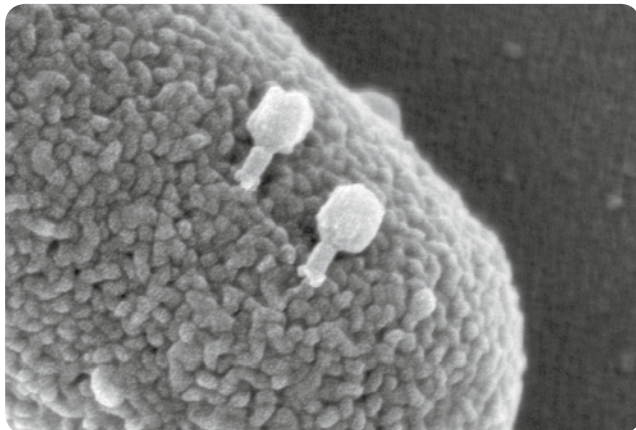


Phage-ligand Technology

Hyglos' core competency is to exploit the principles of bacteriophage biology and the expert use of the proprietary phage-ligand technology for pharmaceutical, diagnostic and research applications. This technology enables the production of state-of-the-art molecules for the effective binding of bacteria and bacterial components and lysis of bacteria. Bacteriophages are viruses that have evolved for millions of years to only recognize and infect bacteria everywhere they live, even under extreme conditions. Hyglos targets at the highly specific interaction of naturally occurring bacteriophages with their host bacteria. The technology makes use of molecules (proteins), which are identified from bacteriophages, characterized and recombinantly expressed for various applications. Such molecules are perfectly suitable for the use in the fields of food and human diagnostics as well as the selective decolonisation of pathogenic bacteria e.g. *Staphylococcus aureus*.

The below image seen through an electron microscope shows "the unfriendly take over" - bacteriophages binding to the surface of a bacteria cell.



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Contact



creative bioscience solutions

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Hyglos facilities in Biopark II, Regensburg

New diagnostic and therapeutic solutions for human pathogens & toxins

Technology · Company Focus · Products & Services · Contact

Company Focus

The challenge:

Bacteria have settled in every ecological niche in nature. Many of them are beneficial and harmless, but certain bacteria can invade organisms from any natural environment. Depending on the host's immune system and the type of bacteria and bacterial toxin, infections may become dangerous or even fatal.

Major problems caused by bacteria are:

- Bacterial components (endotoxins) relevant in research and pharma industry
- Human infections caused by bacteria - including multi-resistance against antibiotics
- Outbreaks due to bacteria in food

The solution:

Hyglos develops products for diagnostic and antimicrobial applications based on proteins derived from naturally occurring bacteriophages. The idea of using the power of nature for human benefit is nothing new. However, in contrast to the use of complete "viable" bacteriophages, the application of isolated bacteriophage proteins provides significant advantages such as re-engineering of the molecules according to their specific requirements.

Hyglos develops and provides new solutions for:

- Pharma & Research: Endotoxin Removal and Endotoxin Detection
- Clinical: Diagnostics, Prevention and Treatment of hospital acquired infections, e.g. MRSA
- Food: Diagnostics and Preservation

Products

EndoTrap® Family

Endotoxin removal

EndoGrade® Family

Endotoxin-free proteins and reagents

Endotoxin Detection

New ELISA-based method

Tools for Diagnostic and Antimicrobial Applications

Bacteria binding and lysing molecules

Bacteria Capture Kits

Sample preparation for food and environmental microbiology



Services

Furthermore, using state of art technology, Hyglos offers:

Endotoxin Detection Service

Endotoxin Removal Service

From Gene to Protein Service



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