

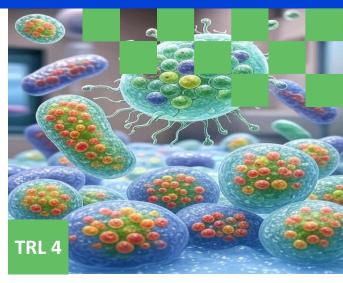
# Bacteriophage Strain and Its Application for Combating Salmonella enterica



The invention relates to a bacteriophage designated vB\_SenS-3, belonging to the Siphoviridae family, isolated from municipal wastewater. It has been confirmed that this phage shows lytic activity against various serotypes of Salmonella enterica, effectively destroying bacterial cells both in vitro and in vivo.

Genomic analysis revealed the absence of genes encoding toxins or virulence factors and confirmed its classification as a lytic virus, supporting its safety of use.

The invention can be applied in the food industry as a natural agent to reduce the risk of food contamination, as well as in veterinary and human medicine as an alternative to antibiotics for treating Salmonella enterica infections.



#### Research Team

#### University of Gdańsk:

Professor Grzegorz Węgrzyn, Professor Alicja Węgrzyn, PhD Agata Jurczak-Kurek, MSc Karolina Ciemińska, MSc Katarzyna Kosznik-Kwaśnicka, MSc Łukasz Grabowski,

### **IP Protection**

The invention is the subject of polish patent application: **P.433077** 

# **Applications**

- Food industry,
- Food safety,
- Medicine,
- Veterinary medicine

# **Cooperation opportunities**

- Research partnership,
- Licensing,
- Technology sale