Efficacy of Tail Fiber

We showed that the degradation of capsule by phage tail fiber could affect the efficacy of antibiotics. Therefore, it is important to consider the bacterial lysate when combining phages with ...

Furthermore, we developed a phage evolution approach to obtain phages with two amino acid substitutions in its tail fiber protein, which enabled receptor retargeting and host range expansion.

Through natural evolution and structural modeling, we identified host-range-determining regions (HRDRs) in the T3 phage tail fiber protein and developed a high-throughput strategy to genetically ...

Phage tail fibers, or tailspikes, which exhibit capsule depolymerization activities, target and degrade the LPS or CPS matrix. Detailed comparative genomic analysis revealed significant ...

Genomic analysis identified key mutations in the tail fiber protein, critical for host range expansion. Evolved phages exhibited enhanced stability and lytic activity under varying ...

In this paper, the authors describe how they performed targeted mutagenesis of specific phage regions that are critical for bacterial recognition, creating diversity at binding regions that slows evolution of ...

We modified and expanded the host range of PH204 through homologous recombination and studied the effect of the long tail fiber on the host range by measuring the host range, biological ...

In this paper, the authors describe how they performed targeted mutagenesis of specific phage regions that are critical for bacterial recognition, creating diversity ...

Understanding phage evolution is critical for the development of improved phage therapies as well as the tracking of phage populations during infection. Here, we characterized phage ...

Moreover, genome analysis identified two amino acid substitutions (V303L and G317V) in its tail fiber protein. Additionally, phage E12-2 improved disease control efficiency by 51 % compared to the wild ...

We showed that the degradation of capsule by phage tail fiber could affect the efficacy of antibiotics. Therefore, it is important to consider the bacterial ...

In this study, we conducted a comprehensive analysis of the tail fiber/spike proteins from 204 A. baumannii phages. By constructing a proteomic tree and systematically annotating 313 tail fiber/spike ...

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