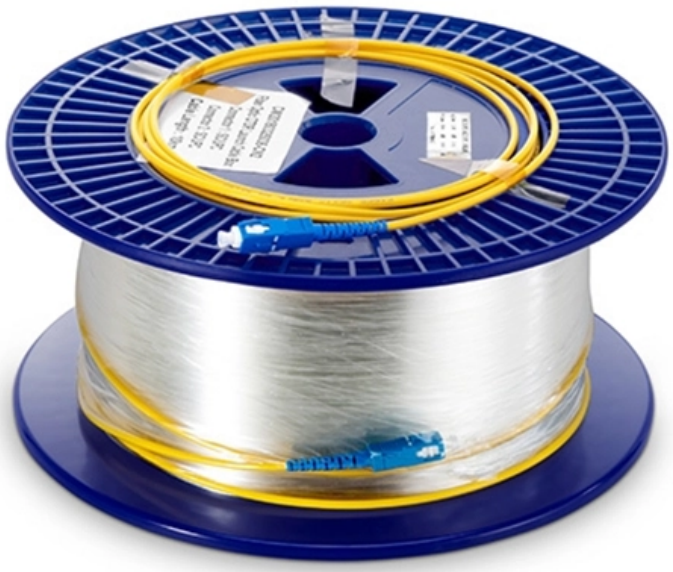
Syropy AI Connectivity

Tail Fibers and Bundle-shaped Tail Fibers



Tail Fibers and Bundle-shaped Tail Fibers

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Towards a complete phage tail fiber structure atlas

RBPseg workflow in detail, step-by-step demonstrating the 682 architecture of RBPseg using TC14 fiber as example. A FASTA file is input to ESMfold, which 683 generates a monomeric model.

Itf

Mature tail spike protein Assembles together with p132 to form the three L-shaped long tail fibers and the collar structure at the junction between the tail tube and the conical tail tip

Anatomy of the Spinal Cord

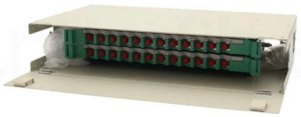
The spinal cord is a cylindrical bundle of nerve fibers and associated tissue, enclosed within the spine, and connects nearly all parts of the body to the

Structure of the siphophage neck-Tail complex suggests

Here, we present the structure of the siphophage lambda "wild type," the most widely used, laboratory-adapted fiberless mutant. The neck-tail complex

Architecture of the bacteriophage lambda tail: Structure

Bacteriophage lambda has a double-stranded DNA genome and a long, flexible, non-contractile tail encoded by a contiguous block of 11 genes downstream of the head genes. The tail



Nearly complete structure of bacteriophage DT57C reveals

The T5 family of viruses are tailed bacteriophages characterized by a long non-contractile tail. The bacteriophage DT57C is closely related to the paradigmal T5 phage, though it recognizes a

Structural Insights into the Chaperone-Assisted

Abstract At the first step of phage infection, the receptor-binding proteins (RBPs) such as tail fibers are responsible for recognizing specific host surface receptors.

Chapter 20965

Here, we will discuss the function and dynamics of the tail of the Caudovirales. We will examine the similarities and differences of all three families belonging to this order and point out specific

Asymmetric Structure of Podophage GP4 Reveals a Novel

Request PDF , Asymmetric Structure of Podophage GP4 Reveals a Novel Architecture of Three Types of Tail Fibers , Bacteriophage tail fibers (or called tail spikes) play a critical role in the

Major tail proteins of bacteriophages of the order Caudovirales

In addition, T4 phage possesses short and long tail fibers at the baseplate and a head whisker at the head-to-tail connector (55, 56). The binding of the long tail fibers to LPSs and OmpC

Tail Fiber: Types, Functions, and Common Interfaces

Similar to fiber optic jumpers, tail fibers are classified into single-mode and multimode types, differing in color, wavelength, and transmission distances. Generally, multimode tail fibers are

Structural Insights into the Chaperone-Assisted Assembly of a

Structural analysis enabled us to propose the assembly mechanism of phage tail fibers, in which the chaperone first protects the intertwined and repetitive distal moiety of each fiber subunit,

Structure, function and assembly of the long, flexible tail of

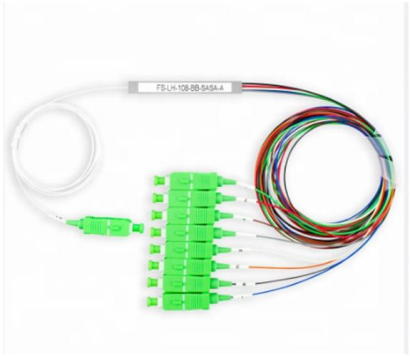
Depending on the morphology of their tail, phages are classified as Siphoviridae (long flexible tail), Myoviridae (long contractile tail) and Podoviridiae (short tail). The assembly pathway of

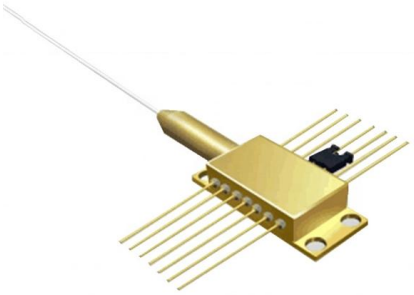
Understanding Bacteriophage Tail Fiber

The baseplate completes the conformation conversion from hexagonal to star shape during the tail-fiber-binding process and is oriented parallel to the cell surface.

Beam -shaped tail fiber failure

Bundle tail fibers, also known as ribbon fibers, are multiple fibers that are aligned and bonded together in a ribbon-like shape. The bundle tail fiber is a crucial component in the fiber optic





Towards a complete phage tail fiber structure atlas.

Additionally, we conducted a structural classification of 67 fibers and their domains, which identified 16 well-defined tail fiber classes and 89 domains. Our findings suggest the existence of

The small genome, virulent, non-contractile tailed bacteriophages that

Their virions have isometric icosahedral heads in the 60-70 nm diameter range, and although their long noncontractile tails vary somewhat in length, width, flexibility and shape of the tail

Nearly complete structure of bacteriophage DT57C reveals

Here, we present the structure of DT57C determined by cryo-EM, and an atomic model of the virus, which was further explored using all-atom molecular dynamics simulations.

A Closer Look at a T4

An individual T4 phage consists of six major parts; head, collar, sheath, tube, endplate, and tail fibers. "Head" and "tail" refer to the two most conspicuous parts of the individual phage particle, which is

RBPseg: Toward a complete phage tail fiber structure atlas

Here, we introduce RBPseg, a method that combines monomeric ESMFold predictions with a structural-based domain identification approach, to divide tail

Tail fiber function and structure , Bacteriophage T4 Tail

Structurally these viruses have a prolate icosahedral capsid (the head) attached at one vertex to a long protein infection promoting structure (the tail) (Figure 2-1). At

Understanding Bacteriophage Tail Fiber Interaction with

In this review, we comprehensively summarize how the tail fibers of the T4 phage recognize host surface receptors at single-molecule and atomic levels.

Branched Lateral Tail Fiber Organization in T5-Like Bacteriophages

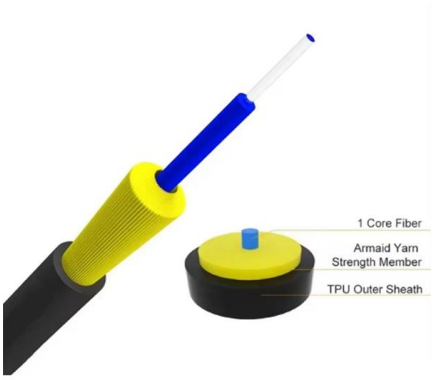
The T5-like siphoviruses DT57C and DT571/2, isolated from horse feces, are very closely related to each other, and most of their structural proteins are also nearly identical to T5 phage. Their

Fiber tail fiber characteristics

The ST-type pigtail is usually used for wiring equipment, such as fiber distribution frames, fiber modules, etc. The bundled pigtail has only one end with

Structures of Viruses

The tail fibers assist the virus in attaching to the host cell. Viruses come in diverse types but there are a limited number of basic designs -some are generally



Phage tail fibre assembly proteins employ a modular structure to drive

The crystal structure of a complex between the tail fibre and tail fibre assembly (Tfa) protein of Escherichia coli phage Mu reveals the mechanisms by which Tfa regulates fibre assembly

Bundle tail fiber Failure analysis

Bundle tail fibers, also known as ribbon fibers, are multiple fibers that are aligned and bonded together in a ribbon-like shape. The bundle tail fiber is a

Structure, function and assembly of the long, flexible tail of

Siphophages, accounting for ~60% of known phages, bear a long, flexible tail that allows host recognition and safe delivery of the DNA from the capsid to the cytoplasm of the infected cell.

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