ABSTRACT  Bacteriophage StarStruck is a lytic Siphoviridae phage that infects Gordonia terrae 3612. The 68,128-bp genome of StarStruck has a GC content of 65.4% and contains 92 protein-coding genes, including the gene for a HicA-like toxin. StarStruck was assigned to subcluster CR2 based on >35% shared gene content with other cluster CR genomes in the Actinobacteriophage Database.
A 12,000-bp region containing 23 genes. The right arm contains reverse-transcribed genes (gp54 to gp92), including two WhiB family transcription factors (gp56 and gp74), a DnaE-like DNA polymerase (gp61), and a DNA helicase (gp73). StarStruck lacks lysogenic genes such as an integrase and an immunity repressor, indicating that StarStruck is a lytic phage (19).

Like many cluster CR phages, StarStruck encodes a HicA-like toxin (gp7) within the 12,000-bp region separating the small- and large-subunit terminases. Another interesting feature of StarStruck is the location of the lysin B (gp19) within this region, rather than adjacent to the lysin A genes (protease C39 domain [gp49] and glycosyl hydrolase domain [gp50]), which are located downstream of the minor tail proteins.

Data availability. StarStruck is available at GenBank with the accession number ON456333 and the Sequence Read Jhu7 (SRA) accession number SRX14816101.

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