



Draft Genome Sequences of *Dermacoccus nishinomiyaensis* Strains UCD-KPL2534 and UCD-KPL2528 Isolated from an Indoor Track Facility

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ABSTRACT We present here the draft genome sequences of *Dermacoccus nishinomiyaensis* strains UCD-KPL2534 and UCD-KPL2528, which were isolated at an indoor track facility in Medford, MA, USA (42.409716, -71.115169) from an exit door handle and settle dust, respectively. The genome assemblies contain 3,088,111 bp in 58 contigs and 3,162,381 bp in 100 contigs, respectively.

Members of the genus *Dermacoccus* have been previously isolated from deep-ocean sediment (1, 2), coral (3, 4), tap water (5), humans (6), insects (7–9), and cured meat (10). *Dermacoccus* spp. are characterized as Gram-positive, nonmotile, and aerobic cocci that commonly produce orange pigment (6, 11, 12). Interest in *Dermacoccus* spp. has focused on phenazine derivative production for potential applications as dyestuffs or antioxidant compounds (13–15). *Dermacoccus* spp. are rarely pathogens to humans, with only one report of a central venous catheter infection and two reports of *Dermacoccus* spp. potentially involved in polymicrobial infections (16–18). Recently, Chng and colleagues suggested that *Dermacoccus* spp. might antagonize *Staphylococcus* spp. during flares of atopic dermatitis, a potentially beneficial role (19).

We isolated *Dermacoccus nishinomiyaensis* UCD-KPL2534 from a metal door handle and *Dermacoccus nishinomiyaensis* UCD-KPL2528 from settle dust of an indoor track facility in Medford, MA, as part of a project to produce reference genomes for microbes resident in the built environment (20). A nylon-flocked swab (COPAN) dipped in sterile buffer (0.1 M NaCl and 0.1% Tween 80) was rubbed on the surfaces, inoculated onto selective brain heart infusion agar containing fosfomycin (20 µg/ml), and incubated aerobically at 37°C for 5 days. Two small circular pigmented colonies were selected for analysis. Genomic DNA for whole-genome sequencing was extracted using the MasterPure complete DNA and RNA purification kit (Epicentre).

Illumina paired-end libraries were generated using a Nextera DNA sample prep kit (Illumina). We selected 600- to 900-bp fragments using a Pippin Prep (Sage Science) and sequenced the resulting libraries on an Illumina MiSeq, with a read length of 300 bp, which produced 1,573,606 (UCD-KPL2534) and 4,093,434 (UCD-KPL2528) paired-end reads. Quality trimming and error correction of the reads resulted in 1,429,177 and 3,703,158 high-quality reads using the A5-miseq assembly pipeline (version 05/22/2015) (21). The assembly for strain UCD-KPL2534 contained 58 scaffolds (minimum, 604 bp; maximum, 591,826 bp; N_{50} , 171,024 bp). The assembly for strain UCD-KPL2528 contained 100 scaffolds (minimum, 1,037 bp; maximum, 523,322 bp; N_{50} ,

Received 6 December 2016 Accepted 23 December 2016 Published 23 February 2017

Citation Klein BA, Lemon KP, Gajare P, Jospin G, Eisen JA, Coil DA. 2017. Draft genome sequences of *Dermacoccus nishinomiyaensis* strains UCD-KPL2534 and UCD-KPL2528 isolated from an indoor track facility. Genome Announc 5:e01652-16. <https://doi.org/10.1128/genomeA.01652-16>.

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119,501 bp). The final assemblies both have a G+C content of 69.1% and error-corrected coverage estimates of 57- and 133-fold for UCD-KPL2534 and UCD-KPL2528, respectively. We assessed genome completeness with PhyloSift and CheckM; all PhyloSift marker genes were present, and CheckM reported 100% completeness with less than 1% contamination estimations for both isolates (22, 23).

The genomes were annotated using the RAST server (default settings, 14 April 2016) (24). *D. nishinomiyaensis* strains UCD-KPL2528 and UCD-KPL2534 both contain 2,892 predicted coding sequences (CDSs). Thirty-one proteins differ based strictly on predicted presence. Additionally, two partial phages are predicted in strain UCD-KPL2528 but not strain UCD-KPL2534; neither strain has a predicted clustered regularly interspaced short palindromic repeat (CRISPR) system (25, 26). Both genomes harbor clusters encoding carotenoid biosynthesis with greatest similarity to *Dermacoccus* sp. Ellin185. *D. nishinomiyaensis* UCD-KPL2534 also has two putative biosynthetic clusters encoding antifungal macrolide/macrocylic molecules that strain UCD-KPL2528 and other published *Dermacoccus* spp. lack (27).

We assigned a putative species designation of *Dermacoccus nishinomiyaensis* to each isolate using both PhyloPhIAn and 16S-rRNA-gene-based phylogeny of *Dermacoccus* spp. generated from sequences in the Ribosomal Database Project (28, 29) (<https://doi.org/10.6084/m9.figshare.4284344.v1>).

Accession number(s). This whole-genome shotgun project is deposited at DDBJ/ENA/GenBank under the accession numbers [MQVT00000000](https://doi.org/10.6084/m9.figshare.4284344.v1) and [MQVU00000000](https://doi.org/10.6084/m9.figshare.4284344.v1). The versions described in this paper are MQVT01000000 and MQVU01000000, respectively.

ACKNOWLEDGMENTS

We thank Tufts University for access to the Gantcher Indoor Track Center facility and support of facilities and microbial research. Sequencing was performed at the DNA Technologies Core facility in the Genome Center at the UC Davis, Davis, CA.

This work was funded in part by a grant (to J.A.E.) and a postdoctoral fellowship (to B.A.K.) from the Alfred P. Sloan Foundation as part of their program on the Microbiology of the Built Environment and by the National Institutes of Health through the National Institute of Allergy and Infectious Diseases R01 AI101018 (to K.P.L.).

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