**Citrobacter freundii strain MSB1_1H isolate MSB1_1H chromosome 1, complete sequence**

NCBI Reference Sequence: NZ_LR890181.1

FASTA Graphics

Go to:

LOCUS NZ_LR890181 1047 bp DNA linear CON 17-JUN-2025
DEFINITION Citrobacter freundii strain MSB1_1H isolate MSB1_1H chromosome 1, complete sequence.
ACCESSION NZ_LR890181 REGION: 3127928..3128974
VERSION NZ_LR890181.1
DBLINK BioProject: PRJNA224116
BioSample: SAMEA3357462
Assembly: GCF_904859905.1
KEYWORDS RefSeq.
SOURCE Citrobacter freundii
ORGANISM Citrobacter freundii
Bacteria; Pseudomonadati; Pseudomonadota; Gammaproteobacteria; Enterobacterales; Enterobacteriaceae; Citrobacter; Citrobacter freundii complex.
REFERENCE 1
AUTHORS Hawkey,J.
TITLE Direct Submission
JOURNAL Submitted (16-OCT-2020) THE UNIVERSITY OF MELBOURNE, 30 Flemington Rd, Australia
COMMENT REFSEQ INFORMATION: The reference sequence is identical to LR890181.1.
The annotation was added by the NCBI Prokaryotic Genome Annotation Pipeline (PGAP). Information about PGAP can be found here: https://www.ncbi.nlm.nih.gov/genome/annotation_prok/

##Genome-Annotation-Data-START##
Annotation Provider :: NCBI RefSeq
Annotation Name :: GCF_904859905.1-RS_2025_06_17
Annotation Date :: 06/17/2025 11:40:18
Annotation Pipeline :: NCBI Prokaryotic Genome Annotation Pipeline (PGAP)
Annotation Method :: Best-placed reference protein set; GeneMarkS-2+
Annotation Software revision :: 6.10
Features Annotated :: Gene; CDS; rRNA; tRNA; ncRNA
Genes (total) :: 5,048
CDSs (total) :: 4,924
Genes (coding) :: 4,854
CDSs (with protein) :: 4,854

Genes (RNA) :: 124
rRNAs :: 9, 8, 8 (5S, 16S, 23S)
complete rRNAs :: 9, 8, 8 (5S, 16S, 23S)
tRNAs :: 83
ncRNAs :: 16
Pseudo Genes (total) :: 70
CDSs (without protein) :: 70
Pseudo Genes (ambiguous residues) :: 0 of 70
Pseudo Genes (frameshifted) :: 24 of 70
Pseudo Genes (incomplete) :: 48 of 70
Pseudo Genes (internal stop) :: 12 of 70
Pseudo Genes (multiple problems) :: 14 of 70
##Genome-Annotation-Data-END##
COMPLETENESS: full length.

FEATURES Location/Qualifiers

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ORIGIN

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