

ONE DAY ONE GENOME

Paeniclostridium sordellii



ISOLATED FROM THE STOOL SAMPLE OF A
HEALTHY INDIVIDUAL

Quality of Genome Assembly and Annotation:

Results from indigenously developed **BHARAT** analysis pipeline: (**B**acterial **H**ybrid genome **A**ssembly and **R**apid **A**nnotation **T**oolset)

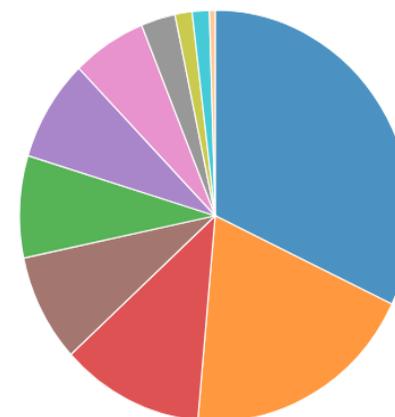
Table 1: Assembly Details

| | |
|---------------|--------------|
| Contigs | 39 |
| GC Content | 27.32 |
| Contig L50 | 2 |
| Genome length | 3,484,890 bp |
| Contig N50 | 444,019 |

Table 2: Annotated Genome Features

| | |
|----------------|-------|
| CDS | 3,427 |
| tRNA | 61 |
| Repeat Regions | 36 |
| rRNA | 9 |

Subsystem Analysis



Subsystem (Subsystems, Genes)

- METABOLISM (68, 424)
- PROTEIN PROCESSING (41, 227)
- STRESS RESPONSE, DEFENSE, VIRULENCE (25, 82)
- DNA PROCESSING (18, 80)
- ENERGY (17, 104)
- CELLULAR PROCESSES (17, 81)
- RNA PROCESSING (13, 55)
- MEMBRANE TRANSPORT (6, 21)
- CELL ENVELOPE (3, 9)
- MISCELLANEOUS (3, 8)
- REGULATION AND CELL SIGNALING (1, 3)

Table 3: Antimicrobial Resistance Genes

| AMR Mechanism | Genes |
|--|--|
| Antibiotic inactivation enzyme | NimB |
| Antibiotic target modifying enzyme | Erm(Q) |
| Antibiotic target in susceptible species | Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p |
| Protein altering cell wall charge conferring antibiotic resistance | PgsA |
| Gene conferring resistance via absence | gidB |
| Efflux pump conferring antibiotic resistance | TetA(P) |

Genome Assembly

