



One Day One Genome

Porphyromonas somerae (NIBMG_HMR_22)

- ✓ A strict anaerobe frequently found in chronic wound
- \checkmark It can contribute to delayed healing ✓ Understanding its genomic adaptations can aid in precision microbiome-based therapies for chronic wounds





Isolated from diabetic wound



Porphyromonas somerae (NIBMG_HMR_22)

Genome Accession Number: INS0010507

Quality of Genome Assembly and Annotation:

Results from indigenously developed BHARAT analysis pipeline: (Bacterial Hybrid genome Assembly and Rapid Annotation Toolset)

Table 1: Assembly Details		Table 2: Annotated Genome Features		
Contigs	87	CDS	2,651	
GC Content	45.18	tRNA	60	
Contig L50	4	Repeat Regions	41	
Genome length	2,154,154 bp	rRNA	15	
Contig N50	91,459		10	

Table 3: Antimicrobial Resistance Genes				
Genes				
Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, fabl, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p,				
CatA family, CatB family, DHA/MOR family, OXA-1 f				
Erm(F)/Erm(35)				
AcrAB-ToIC, AcrZ, EmrAB-ToIC, MacA, MacB, MdtA ToIC, MexHI-OpmD, Tet(A), ToIC/OpmH				
GdpD, PgsA				
AcrAB-ToIC, EmrAB-ToIC, H-NS, OxyR				

genome Assembly and Rapid Annotation Toolset) Subsystem Analysis



Subsystem (Subsystems, Genes)

- METABOLISM (106, 1746)
- PROTEIN PROCESSING (45, 651)
- STRESS RESPONSE, DEFENSE, VIRULENCE (39, 328)
- ENERGY (35, 564)
- MEMBRANE TRANSPORT (26, 250)
- CELLULAR PROCESSES (20, 318)
- DNA PROCESSING (18, 173)
- RNA PROCESSING (14, 190)
- MISCELLANEOUS (13, 213)
- CELL ENVELOPE (10, 150)
- REGULATION AND CELL SIGNALING (4, 33)

Genome Assembly



, inhA, S12p

amily

ABC-