Government of India
Ministry of Science & Technology
Department of Biotechnology

सत्यमेव जयते

BRIC a DBT Organization

NABI Biotechnology & Biomanufacturing

ONE DAY ONE GENOME

Rhodococcus erythropolis C27

UNDERSTANDING ITS GENOMIC POTENTIAL AIDS IN DESIGNING ECO-SOLUTIONS FOR DETOXIFYING PHENOLIC COMPOUNDS FROM INDUSTRIAL AND OIL-CONTAMINATED SITES

Rhodococcus erythropolis **Genome Accession Number: CP109605.1**

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	1
GC Content	62.53
Contig L50	1
Genome length	6,274,870 bp
Contig N50	6,274,870

Table 2: Annotated Genome Features	
CDS	5,974
tRNA	52
Repeat Regions	17
rRNA	3

Subsystem Analysis

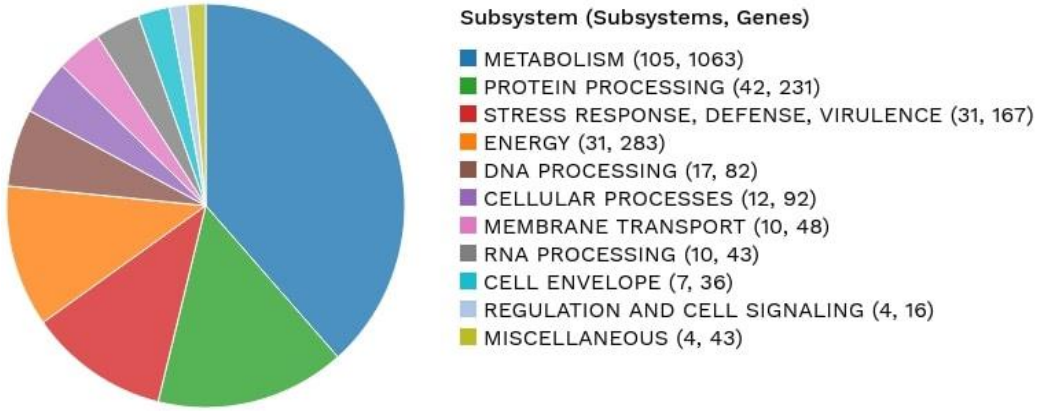

Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	**Genes**
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic target replacement protein	FabG, HtdX
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA,
Regulator modulating expression of antibiotic resistance genes	LpqB, MtrA, MtrB, OxyR

Genome Assembly