



One Day One Genome

Corynebacterium diphtheriae



WGS of microbe can lead to better identification, resistance tracking, and targeted treatment planning

Corynebacterium diphtheriae

Genome Accession Number: INS0017631

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	33
GC Content	53.36
Contig L50	5
Genome length	2,365,977 bp
Contig N50	124,450

Table 2: Annotated Genome Features	
CDS	2,303
tRNA	54
Repeat Regions	30
rRNA	3

Subsystem Analysis

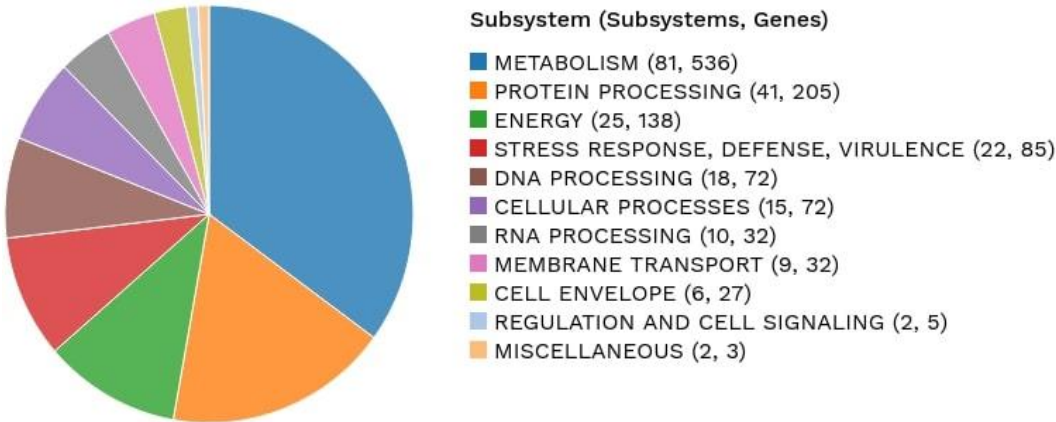


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, Iso-tRNA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic target replacement protein	Rv2671
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Regulator modulating expression of antibiotic resistance genes	LpqB, MtrA, MtrB, OxyR

Genome Assembly

