



ONE DAY ONE GENOME

CUTIBACTERIUM ACNES

Helps maintain skin homeostasis by
eliminating other pathogenic colonizers

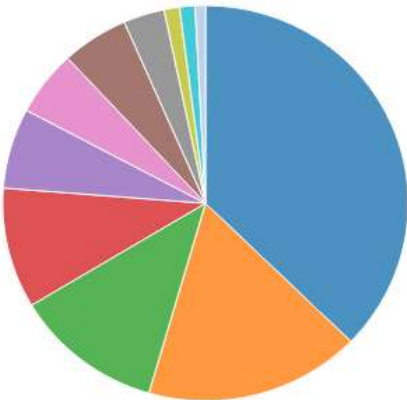


Quality of Genome Assembly and Annotation:

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

Table 1: Assembly Details	
Contigs	30
GC Content	52.60
Contig L50	2
Genome length	3,468,838 bp
Contig N50	838,799

Table 2: Annotated Genome Features	
CDS	3,401
tRNA	98
Repeat Regions	74
rRNA	6



Subsystem Analysis

Subsystem (Subsystems, Genes)	
METABOLISM	(91, 781)
PROTEIN PROCESSING	(42, 325)
ENERGY	(29, 217)
STRESS RESPONSE, DEFENSE, VIRULENCE	(24, 113)
DNA PROCESSING	(16, 93)
RNA PROCESSING	(13, 59)
CELLULAR PROCESSES	(13, 90)
MEMBRANE TRANSPORT	(8, 20)
CELL ENVELOPE	(3, 7)
REGULATION AND CELL SIGNALING	(3, 6)
MISCELLANEOUS	(2, 3)

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
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

