



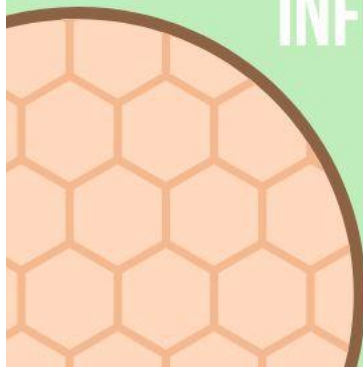
Government of India
Ministry of Science & Technology
Department of Biotechnology



ONE DAY ONE GENOME

Staphylococcus aureus

PLAYS A
SIGNIFICANT
ROLE IN SKIN
INFLAMMATION



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	31
GC Content	32.64
Contig L50	2
Genome length	2,763,691 bp
Contig N50	352,831

Table 2: Annotated Genome Features	
CDS	2,616
tRNA	58
rRNA	4

Subsystem Analysis

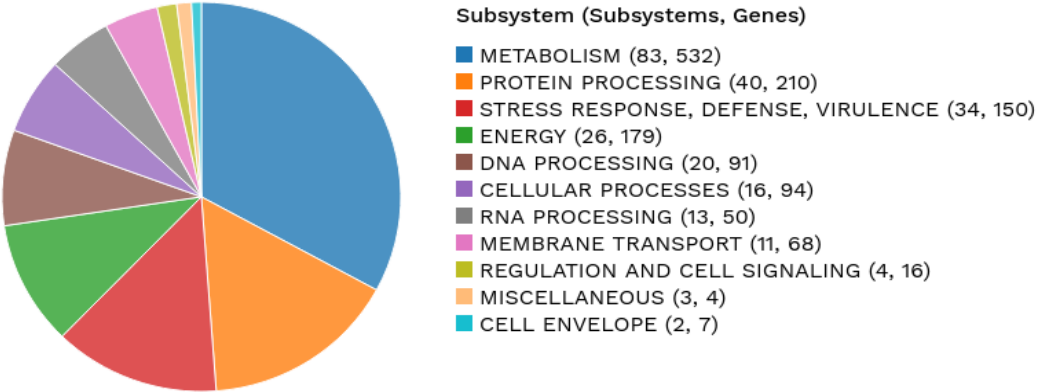


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic resistance gene cluster,cassette,or operon	TcaA, TcaB, TcaB2, TcaR
Antibiotic target in susceptible species	Alr, Ddl, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Protein altering cell wall charge conferring antibiotic resistance	GdpD, MprF, PgsA
Efflux pump conferring antibiotic resistance	BceA, BceB, NorA, Tet(38)
Gene conferring resistance via absence	gidB
Regulator modulating expression of antibiotic resistance genes	BceR, BceS, LiaF, LiaR, LiaS

Genome Assembly

