



One Day One Genome

Staphylococcus aureus

The pathogen is associated with skin infections, sepsis, and carries multiple antimicrobial resistance genes.

Isolated from sewage water



Staphylococcus aureus

Genome Accession Number: INS0022496

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	32.83
Contig L50	1
Genome length	2,801,536 bp
Contig N50	2,801,536

Table 2: Annotated Genome Features	
CDS	2,806
tRNA	61
Repeat Regions	114
rRNA	19

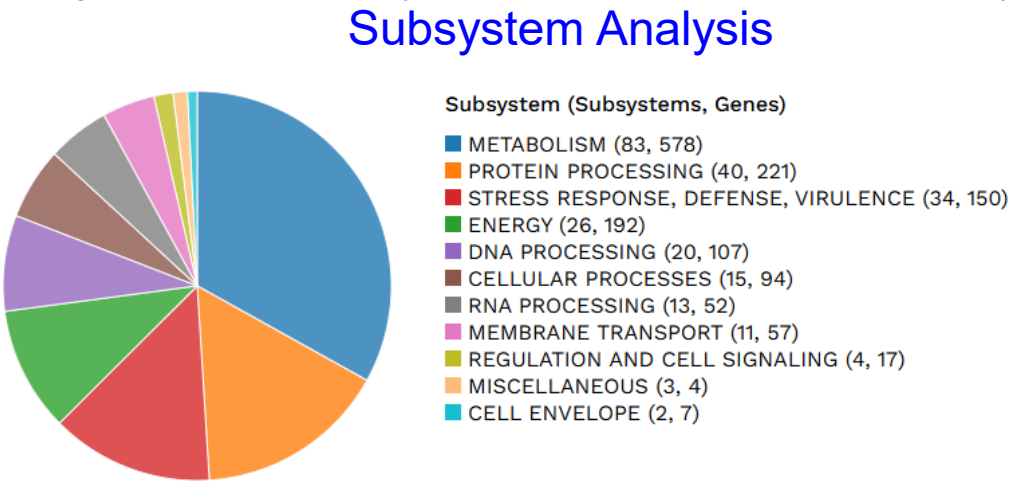


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic inactivation enzyme	BlaZ family
Antibiotic resistance gene cluster,cassette,or operon	TcaA, TcaB, TcaB2, TcaR
Antibiotic target in susceptible species	Alr, Ddl, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, 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)
Regulator modulating expression of antibiotic resistance genes	BceR, BceS, LiaF, LiaR, LiaS

