



One Day One Genome



Staphylococcus sp. (NIBMG_HMR_29)

Isolated from a chronic diabetic wound

Exhibits significant antibiotic resistance and virulence

Genome sequencing will help in formulating novel therapies targeting chronic wound infections while addressing antibiotic resistance

TREATING
SKIN INFECTION



Staphylococcus sp. (NIBMG_HMR_29)

Genome Accession Number: INS0010506

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	32
GC Content	32.45
Contig L50	3
Genome length	2,730,316 bp
Contig N50	504,773

Table 2: Annotated Genome Features	
CDS	2,641
tRNA	51
Repeat Regions	0
rRNA	4

Subsystem Analysis

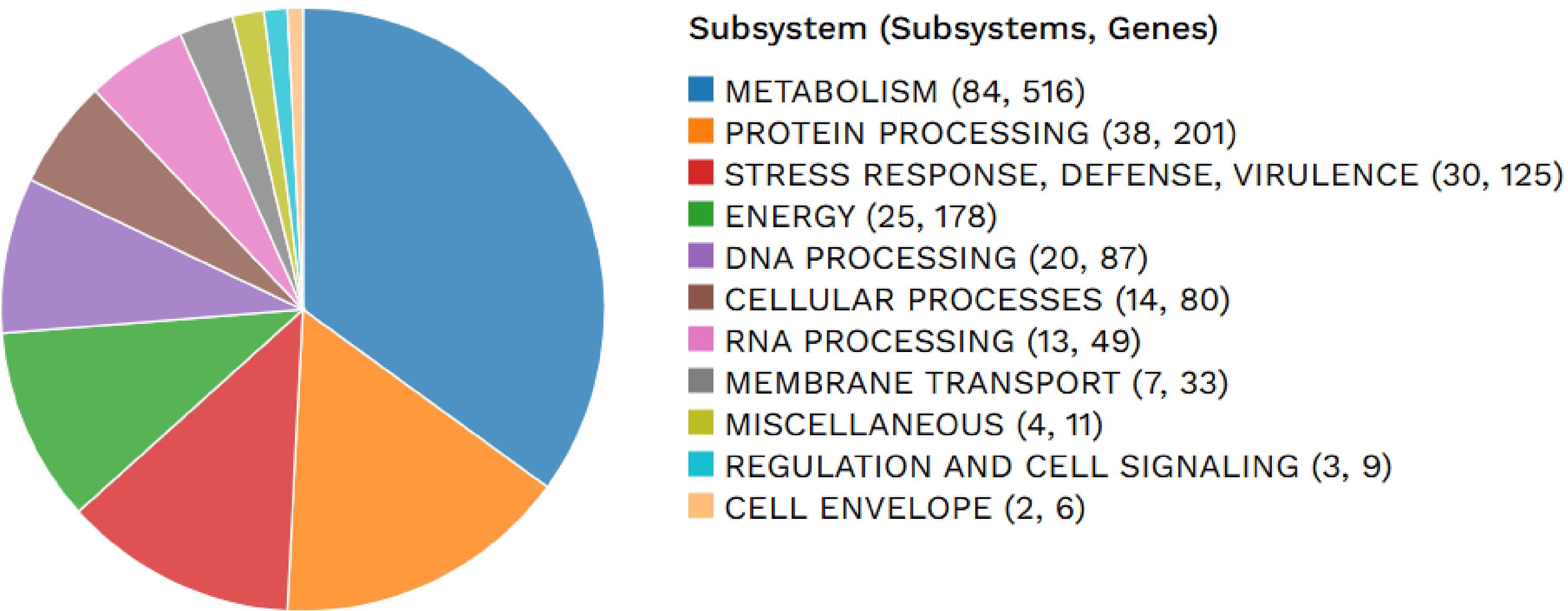


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic resistance gene cluster,cassette,or operon	TcaA, TcaB, TcaB2, TcaR
Antibiotic target in susceptible species	Alr, Ddl, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic target modifying enzyme	Erm(C)
Efflux pump conferring antibiotic resistance	NorA, YkkCD
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, MprF, PgsA

Genome Assembly

