



Acinetobacter variabilis (NIBMG_HMR_6)

ISOLATION

Elbow region of human skin

FUNCTION

Plays critical role in skin microbiome stability and defense, outcompetes pathogens thereby prevents infections

TRANSLATION

Genomics can contribute to novel probiotic-based dermatological therapies for better skin health and treatment options



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	132
GC Content	41.95
Contig L50	16
Genome length	3,364,881 bp
Contig N50	64,832

Table 2: Annotated Genome Features	
CDS	3,369
tRNA	75
Repeat Regions	0
rRNA	4

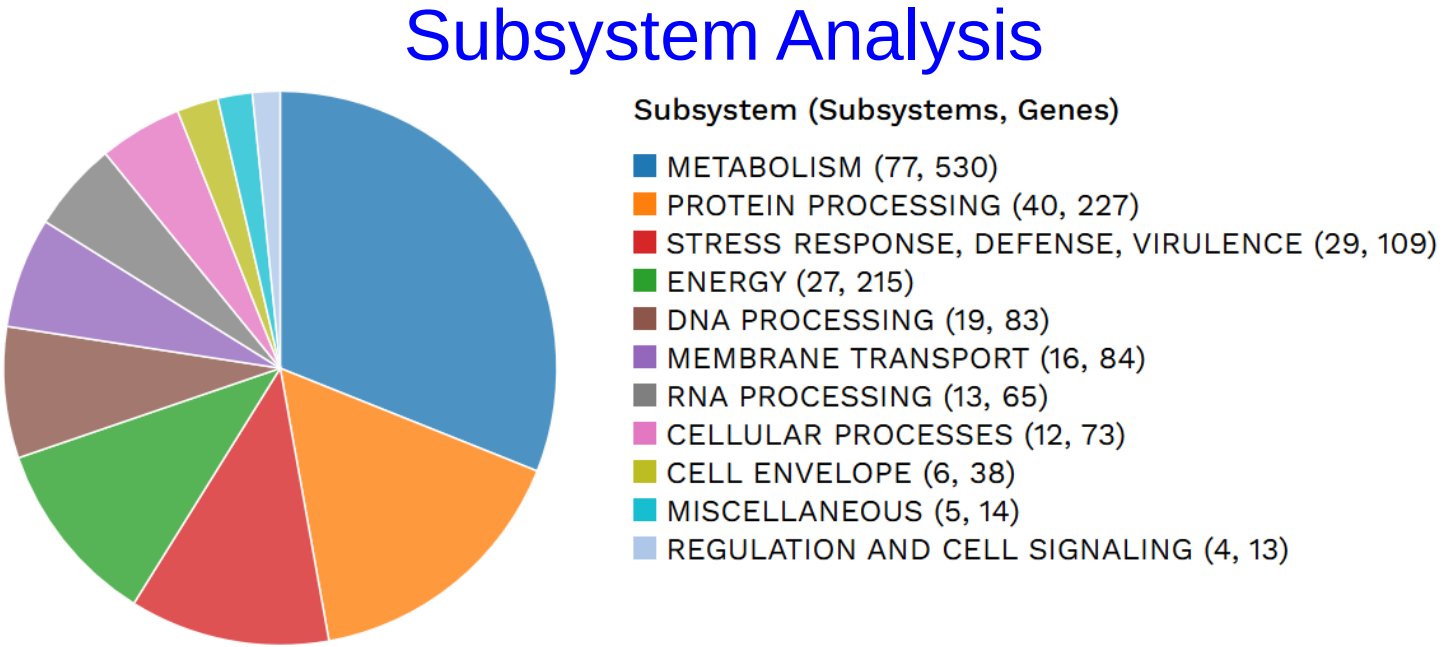


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic inactivation enzyme	Mph(E)/Mph(G) family
Antibiotic target protection protein	BcrC, Msr(E)
Efflux pump conferring antibiotic resistance	EmrAB-TolC, MacA, MacB, MdfA/Cmr, TolC/OpmH
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Regulator modulating expression of antibiotic resistance genes	OxyR

