



One Day One Genome



Streptomyces sp. PSRA5

- >>> **Novel** endophytic actinomycetes
- >>> Isolated from the rhizome of **medicinal plant** *Panax sokpayensis*
- >>> Produce **antimicrobial** compounds
- >>> Potential application in combating **multi-drug resistance**

Streptomyces sp. (PSRA5)

Genome Accession Number: JARJHW000000000

Quality of Genome Assembly and Annotation:

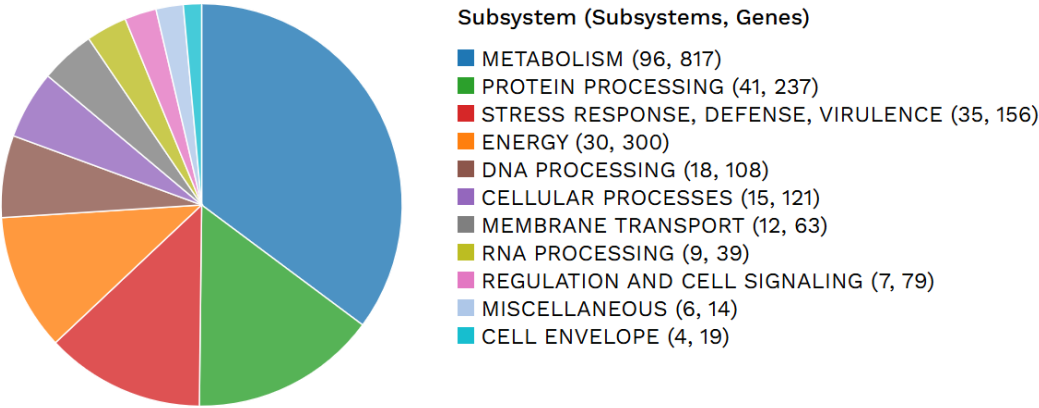
Results from indigenously developed **BHARAT** analysis pipeline: (**B**acterial **H**ybrid genome **A**ssembly and **R**apid **A**nnotation **T**oolset)

Table 1: Assembly Details	
Contigs	362
GC Content	70.65 %
Contig L50	68
Genome length	7,874,420 bp
Contig N50	33,764

Table 2: Annotated Genome Features	
CDS	7,478
tRNA	73
Repeat Regions	0
rRNA	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
Efflux pump conferring antibiotic resistance	CmlV family, Otr(C)
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Antibiotic inactivation enzyme	AAC(2')-I, APH(3'')-I
Antibiotic target modifying enzyme	ErmE/H/O/S/V
Antibiotic inactivation enzyme	AAC(2')-I, APH(3'')-I
Regulator modulating expression of antibiotic resistance genes	MtrA, MtrB

Subsystem Analysis



Genome Assembly

