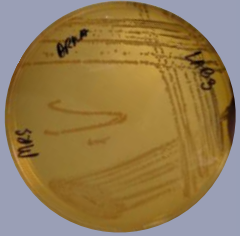




Lactacaseibacillus rhamnosus LAB3 #MTCC 25664

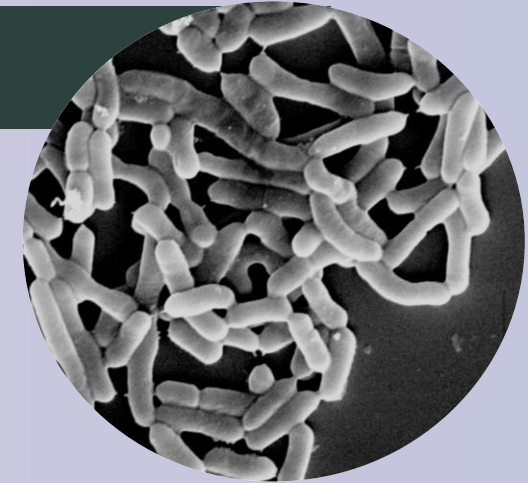
ISOLATION

Faeces of healthy
human infant

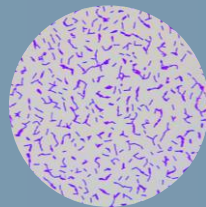


GENOMIC INSIGHTS

Harbors genes for the
metabolism of prebiotics



MORPHOLOGY



APPLICATION

Modulates immune system

Lacticaseibacillus rhamnosus (LAB3)

Genome Accession Number: PRJNA1054369

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	6
GC Content	46.63
Contig L50	1
Genome Length	2,966,912 bp
Contig N50	2,939,598

Table 2: Annotated Genome Features	
CDS	3,185
Repeat Regions	138
tRNA	59
rRNA	15

Subsystem Analysis

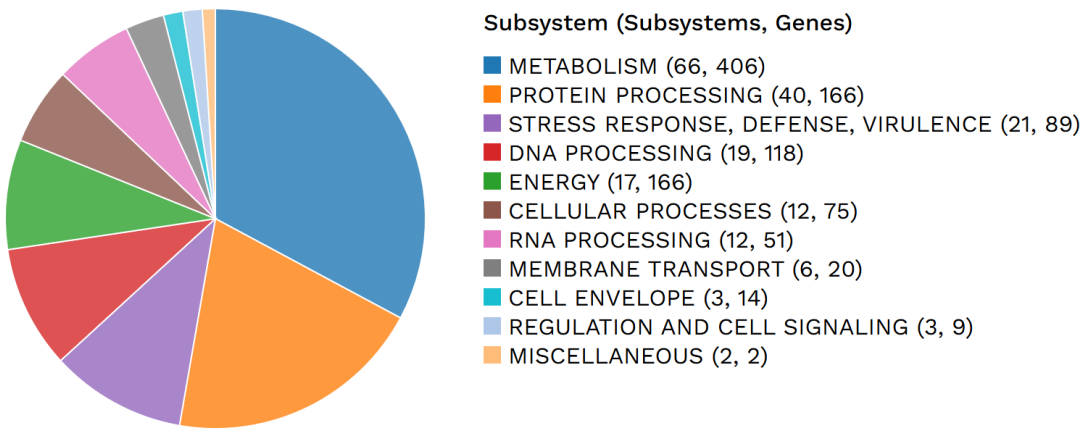


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic target in susceptible species	Alr, Ddl, EF-G, EF-Tu, folA, Dfr, gyrA, gyrB, Iso-tRNA, kasA, MurA, rpoB, rpoC, S10p, S12p
Antibiotic target replacement protein	FabK
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, MprF, PgsA
Regulator modulating expression of antibiotic resistance genes	LiaF, LiaR, LiaS

Genome Assembly

