



#OneDayOneGenomeInitiative

Levilactobacillus brevis LAB6 MTCC 25662

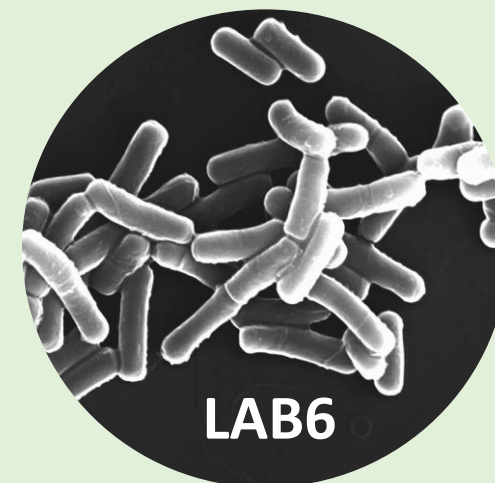


ISOLATION

Bekang, soy fermented food

MORPHOLOGY

Gram-positive bacterium



LAB6

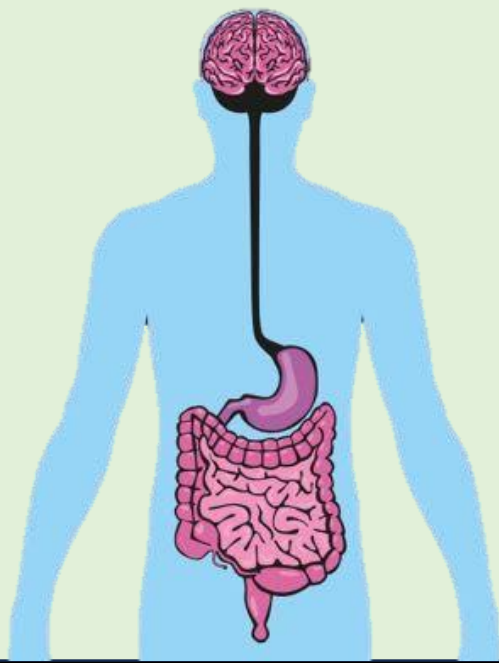
GENOMIC INSIGHTS

Lack of transferable **virulence factors**,

Presence of Glutamate decarboxylase gene cluster

APPLICATION

Produces GABA, Modulates **GUT-BRAIN** axis



Levilactobacillus brevis (LAB6)

Genome Accession Number: JARWBX000000000

Quality of Genome Assembly and Annotation:

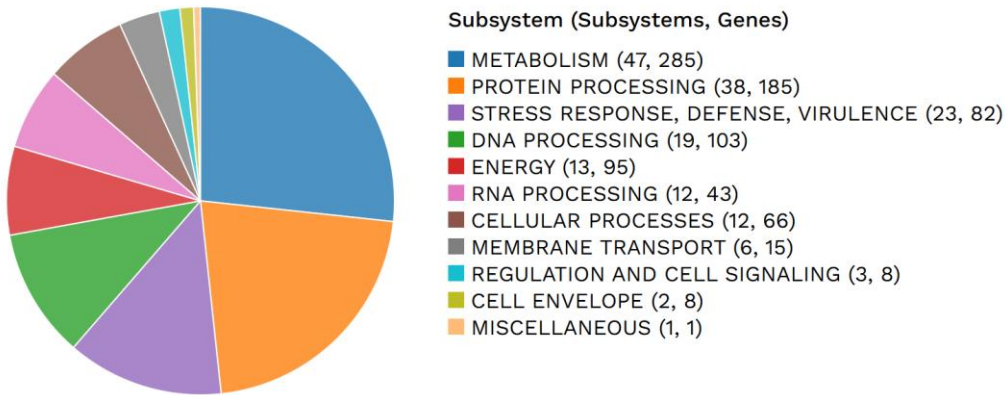
Results from indigenously developed **BHARAT** analysis pipeline:
(**B**acterial **H**ybrid genome **A**ssembly and **R**apid **A**nnotation **T**oolset)

Table 1: Assembly Details	
Contigs	180
GC Content	45.65
Contig L50	21
Genome Length	2,606,217 bp
Contig N50	39,170

Table 2: Annotated Genome Features	
CDS	2,709
tRNA	64
Repeat Regions	29
rRNA	3

Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic inactivation enzyme	NimB
Antibiotic target in susceptible species	Alr, Ddl, EF-G, EF-Tu, folA, Dfr, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rpoB, rpoC, S10p, S12p
Antibiotic target modifying enzyme	RlmA(II)
Antibiotic target replacement protein	fabV
Efflux pump conferring antibiotic resistance	YkkCD
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, MprF, PgsA

Subsystem Analysis



Genome Assembly

