

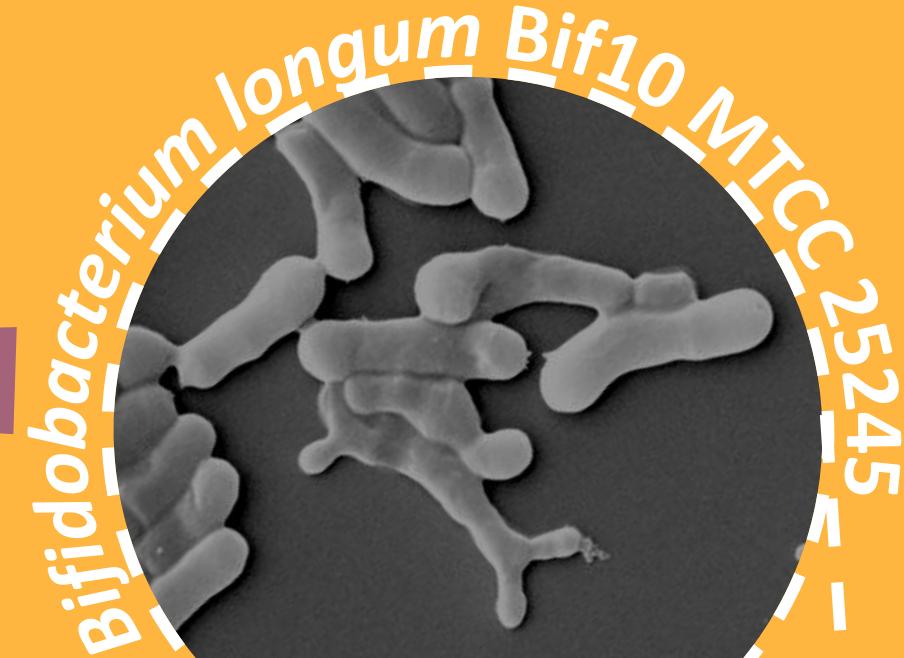


#OneDayOneGenomeInitiative

Metabolizes
Prebiotics

Preventing
intestinal
inflammation

Improves
Gut Barrier
Function



Infant poop



Isolated from
human
infant feces

Quality of Genome Assembly and Annotation:

Results from indigenously developed **BHARAT** analysis pipeline:
(Bacterial Hybrid genome Assembly and Rapid Annotation Toolset)

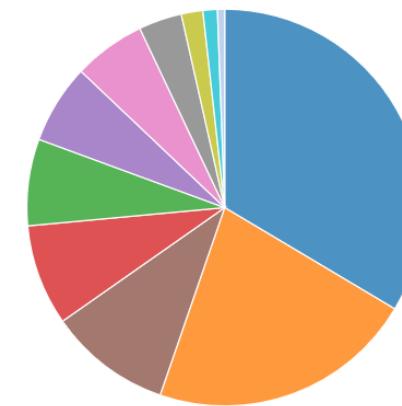
Table 1: Assembly Details

Contigs	68
GC Content	59.64
Contig L50	7
Genome Length	2,617,103 bp
Contig N50	146,450

Table 2: Annotated Genome Features

CDS	2,353
tRNA	85
Repeat Regions	33

Subsystem Analysis



Subsystem (Subsystems, Genes)

- METABOLISM (57, 340)
- PROTEIN PROCESSING (37, 186)
- STRESS RESPONSE, DEFENSE, VIRULENCE (17, 58)
- DNA PROCESSING (14, 68)
- ENERGY (12, 73)
- CELLULAR PROCESSES (11, 63)
- RNA PROCESSING (10, 40)
- MEMBRANE TRANSPORT (6, 16)
- CELL ENVELOPE (3, 6)
- REGULATION AND CELL SIGNALING (2, 4)
- MISCELLANEOUS (1, 1)

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, Iso-tRNA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic target modifying enzyme	Erm(X)
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Regulator modulating expression of antibiotic resistance genes	MtrA, MtrB

Genome Assembly

