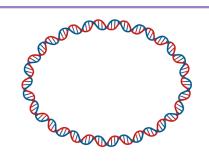


Genome Announcement: Phocaeicola vulgatus Accession#ERS27171163 (ENA)

#INS0022818 (IBDC)



1. Genome Sequencing



BRIC-THSTI

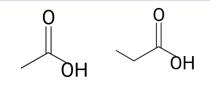
presenting the whole genome sequence of Phocaeicola vulgatus isolated from the gut of a healthy Indian adult.

2. Analysis



Genomic analysis identifies Phocaeicola vulgatus as a SCFAproducing, metabolically flexible gut anaerobe with both commensal and oppotunistic pathogenic potential.

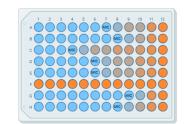
3. Insights



Short Chain Fatty Acids

Genomic insights depicts pyruvate metabolism via the PFOR II pathway, sustains energy through the RNF complex and NADH dehydrogenase, and supports SCFA and amino acid metabolism

4. Translation



Phocaeicola vulgatus Could be a key target for interventions in metabolic and inflammatory diseases due to its therapeutic potential and metabolic adaptability.

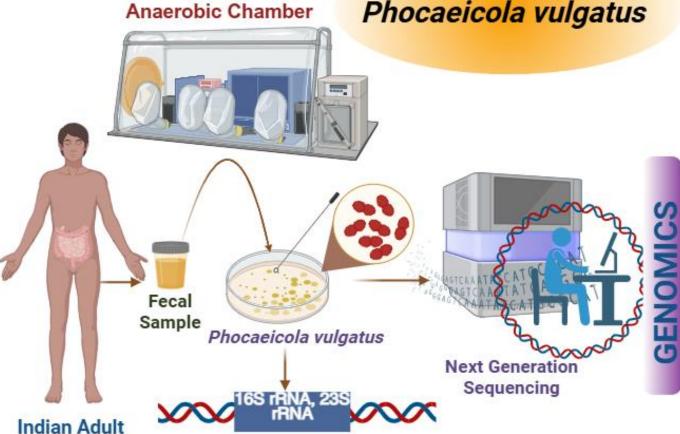
Phocaeicola vulgatus: Our gut's adaptable engineer, building health from fiber while sometimes causing trouble!







Genomics of Phocaeicola vulgatus



Species confirmation

Genome characteristics

Genome size: 4.3Mb

GC percent: 41.16%

CDS: 3508

Total RNA=68

Important Functions

Pyruvate Metabolism:

PFOR-II pathway, pyruvate 2 acetate formate

SCFA pathway:

Fumarate→Succinate Succinate→Propionate