

CULTURE PROFILE

Lactobacillus acidophilus

First described 1900 · Biosafety risk group 1 · NCBI TaxID 1579 · 345 evidence sentences · 65 sources

cellular organisms; Bacteria; Bacillati; Bacillota; Bacilli; Lactobacillales; Lactobacillaceae; Lactobacillus

UNREVIEWED — not verified by a microbiologist

At a glance

1	Media used	MRS agar/broth; Reinforced clostridial medium; M17 medium; Tinsdale / cystine-tellurite; +6 more	high
2	Optimum temperature for growth	6–55 °C	high
3	Time required to grow	1-42 d	high
4	Colony morphology	Grey to black-pigmented colonies were identified using conventional microbiological methods and the VITEK 2 Compact system.	low
5	Gram character	Gram-positive	high
6	Biochemical tests for identification	16S rRNA gene sequencing; VITEK 2; Tween 80 hydrolysis; Haemolysis pattern; +10 more	high

1 Media used

high confidence

- MRS agar/broth
High · score 101.04 · 6 sources
- Reinforced clostridial medium
Moderate · score 6.99 · 2 sources
- M17 medium
Low · score 6.48 · 1 source
- Tinsdale / cystine-tellurite
Low · score 6.21 · 1 source
- Loeffler serum slope
Low · score 2.48 · 1 source
- Thioglycollate broth
Low · score 1.44 · 1 source
- Nutrient agar
Low · score 1.34 · 2 sources
- Wilkins-Chalgren anaerobe agar
Low · score 0.81 · 1 source
- Marine agar 2216
Low · score 0.81 · 1 source
- Mueller-Hinton agar
Low · score 0.78 · 1 source

2 Optimum temperature for growth

high confidence

6–55 °C

High · score 26.4 · 5 sources

79.2 °C

Low · score 1.22 · 1 source

60 °C

Low · score 1.22 · 1 source

4 °C

Low · score 0.46 · 1 source

3 Time required to grow

high confidence

1-42 d

High · score 83.49 · 9 sources

2-3 d

High · score 39.02 · 4 sources

16-24 h

High · score 37.33 · 9 sources

18-24 h

High · score 35.33 · 9 sources

4 Colony morphology

low confidence

Grey to black-pigmented colonies were identified using conventional microbiological methods and the VITEK 2 Compact system.

Low · score 1.32 · 1 source

Comparison of *Streptococcus mutans* load among the study groups showed a statistically significant difference in colony counts between the three groups (p Lactobacillus acidophilus colonies also demonstrated a statistically significant difference among the three groups (p Conclusion : A gluten-containing diet in patients with celiac disease is associated with an increased load of cariogenic bacteria in saliva.

Low · score 1.21 · 1 source

As Tinsdale medium is known to produce standout colony characteristics for rapid identification, we exploited the ability of Tinsdale medium to form characteristic grey to black colonies of *Corynebacterium* genus.

Low · score 1.09 · 1 source

Results Of the 50 specimens processed, 35 (70.0%) yielded colonies with grey-black pigmentation on Tinsdale medium; none of these isolates was finally identified as *Corynebacterium*.

Low · score 1.09 · 1 source

5 Gram character

high confidence

Gram-positive

High · score 27.4 · 7 sources

Gram-negative

High · score 24.98 · 8 sources

Sources disagree: "Gram-positive" (score 27.4) versus "Gram-negative" (score 24.98). Both are shown; a reviewer should decide.

6 Biochemical tests for identification

high confidence

- **16S rRNA gene sequencing**

High · score 10.3 · 3 sources

- **VITEK 2**

Moderate · score 6.23 · 2 sources

- **Tween 80 hydrolysis**

Moderate · score 5.04 · 2 sources

- **Haemolysis pattern**

Moderate · score 4.86 · 4 sources

- **Starch hydrolysis**

Moderate · score 4.74 · 3 sources

- **Antibiotic susceptibility profile**

Low · score 4.27 · 3 sources

- **Catalase — reported negative**
Low · score 4.21 · 2 sources
- **Lipase**
Low · score 3.93 · 3 sources
- **Pigment production**
Low · score 2.95 · 1 source
- **PYR (pyrrolidonyl arylamidase)**
Low · score 2.09 · 1 source
- **Carbohydrate fermentation panel**
Low · score 1.8 · 1 source
- **Short-chain fatty acid profile (GLC)**
Low · score 1.8 · 1 source

7 References

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How these values were derived

Each candidate value was scored as the sum, over every supporting sentence, of the source tier weight multiplied by how squarely the sentence asserts the value and by a recency factor. Culture collections and nomenclatural authorities carry weight 5.0, peer-reviewed literature 3.0, preprints 1.5, and encyclopedic sources 1.0. Confidence is reported as high only where a curated source and at least two independent sources agree. Where a runner-up scored above 60 per cent of the leader, both are shown and the field is flagged as a conflict rather than resolved automatically.

This report aggregates published evidence; it does not replace Bergey's Manual, the Manual of Clinical Microbiology, or the product sheet supplied with the strain. Every field is unreviewed until a microbiologist signs it off.