

CULTURE PROFILE

Staphylococcus aureus

First described 1884 · Biosafety risk group 2 · NCBI TaxID 1280 · 294 evidence sentences · 81 sources

cellular organisms; Bacteria; Bacillati; Bacillota; Bacilli; Caryophanales; Staphylococcaceae; Staphylococcus

UNREVIEWED — not verified by a microbiologist

At a glance

1	Media used	Brain heart infusion (BHI); Blood agar; Baird-Parker agar; Mannitol salt agar; +10 more	high
2	Optimum temperature for growth	42 °C	low
3	Time required to grow	24-48 h	high
4	Colony morphology	The S. aureus L-form colonies showed typical 'fried-egg' morphology and the cells had deficient cell wall, showed morphological diversity, and stained Gram-negative.	low
5	Gram character	Gram-positive	high
6	Biochemical tests for identification	Coagulase — reported negative; Antibiotic susceptibility profile; Catalase; Haemolysis pattern — reported positive; +10 more	high

1

Media used

high confidence

- Brain heart infusion (BHI)
High · score 26.8 · 5 sources
- Blood agar
High · score 12.47 · 6 sources
- Baird-Parker agar
Moderate · score 11.68 · 2 sources
- Mannitol salt agar
Moderate · score 7.02 · 5 sources
- Tryptic soy agar (TSA)
Low · score 3.51 · 2 sources
- Mueller-Hinton agar
Low · score 3.36 · 3 sources
- M17 medium
Low · score 2.79 · 1 source
- Tryptic soy broth (TSB)
Low · score 2.25 · 1 source
- Nutrient broth
Low · score 1.62 · 1 source
- MacConkey agar
Low · score 1.55 · 1 source
- Thioglycollate broth
Low · score 0.93 · 1 source
- MRS agar/broth
Low · score 0.93 · 1 source

2 Optimum temperature for growth

low confidence

42 °C

Low · score 9.66 · 1 source

37 °C

Moderate · score 4.76 · 3 sources

4 °C

Low · score 2.4 · 1 source

33 °C

Low · score 1.22 · 1 source

3 Time required to grow

high confidence

24-48 h

High · score 18.23 · 7 sources

1-6 h

High · score 17.5 · 7 sources

8-24 h

High · score 15.82 · 6 sources

18-24 h

High · score 11.37 · 6 sources

Sources disagree: "24-48 h" (score 18.23) versus "1-6 h" (score 17.5). Both are shown; a reviewer should decide.

4 Colony morphology

low confidence

The S. aureus L-form colonies showed typical 'fried-egg' morphology and the cells had deficient cell wall, showed morphological diversity, and stained Gram-negative.

Low · score 2.1 · 1 source

On solid agar media, staphylococcal SCVs are characterized by tiny colonies with deviant colony morphology.

Low · score 1.09 · 1 source

Microbial isolates were identified through Gram staining, colony morphology, and biochemical tests (catalase, coagulase, oxidase).

Low · score 1.09 · 1 source

Nasal swabs taken from them were inoculated onto Blood Agar & Mannitol Salt Agar within 1 hour and incubated aerobically at 37 °C for 24-48 hours. beta-haemolytic colonies & Mannitol fermenting colonies which showed gram positive cocci in clusters in gram staining and produced Catalase & Coagulase were identified as S. aureus .

Low · score 1.05 · 1 source

5 Gram character

high confidence

Gram-positive

High · score 54.56 · 7 sources

Gram-negative

High · score 42.64 · 3 sources

Sources disagree: "Gram-positive" (score 54.56) versus "Gram-negative" (score 42.64). Both are shown; a reviewer should decide.

6 Biochemical tests for identification

high confidence

- Coagulase — reported negative

High · score 32.65 · 8 sources

- Antibiotic susceptibility profile

High · score 28.76 · 7 sources

- **Catalase**
High · score 12.77 · 5 sources
- **Haemolysis pattern — reported positive**
Moderate · score 7.76 · 6 sources
- **VITEK 2**
Moderate · score 6.65 · 2 sources
- **Pigment production**
Low · score 3.8 · 3 sources
- **Lecithinase (egg yolk)**
Low · score 3.28 · 1 source
- **Lipase**
Low · score 2.71 · 2 sources
- **MALDI-TOF MS**
Low · score 1.48 · 1 source
- **16S rRNA gene sequencing**
Low · score 1.48 · 1 source
- **Aerotolerance test — reported negative**
Low · score 1.47 · 2 sources
- **DNase — reported positive**
Low · score 1.09 · 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.