

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 <i>S. aureus</i> 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

"Most *Candida* spp. exhibited a high auto-aggregation percentage in brain heart infusion broth supplemented with yeast extract (BHIYE)."

Aggregation and biofilm formation of mono- and co-culture *Candida* species and *Staphylococ...* — PubMed (NCBI E-utilities), 2025

• Blood agar

High · score 12.47 · 6 sources

"Culture on CSA was then prospectively compared to a conventional laboratory method, i.e. , culture on 5% horse blood agar (HBA), catalase test, and latex agglutination test (HBA-catalase-latex), for isolation and presumptive identification of *S. aureus* from 2,000 consecutive clinical samples."

Evaluation of CHROMagar *Staph. aureus*, a new chromogenic medium, for isolation and presum... — PubMed (NCBI E-utilities), 2000

• Baird-Parker agar

Moderate · score 11.68 · 2 sources

"Baird-Parker agar remains, however, the medium of choice for direct plating and enumeration of *S. aureus* in both Europe and the US."

Media used in the detection and enumeration of *Staphylococcus aureus*. — PubMed (NCBI E-utilities), 1995

• Mannitol salt agar

Moderate · score 7.02 · 5 sources

"Tryptic soy agar (TSA) presented greater bacterial recovery than mannitol salt agar (MSA), CHROMagar *staph aureus*, Chapman stone medium, and Baird-Park agarose ($P < 0.05$)."

Impact of culture media and sampling methods on *Staphylococcus aureus* aerosols. — PubMed (NCBI E-utilities), 2015

• Tryptic soy agar (TSA)

Low · score 3.51 · 2 sources

"Tryptic soy agar (TSA) presented greater bacterial recovery than mannitol salt agar (MSA), CHROMagar *staph aureus*, Chapman stone medium, and Baird-Park agarose ($P < 0.05$)."

Impact of culture media and sampling methods on *Staphylococcus aureus* aerosols. — PubMed (NCBI E-utilities), 2015

- **Mueller-Hinton agar**

Low · score 3.36 · 3 sources

"After identification of the isolates, antimicrobial susceptibility test was performed on Mueller-Hinton agar by modified Kirby-Bauer disc diffusion method and the presence of mecA and nuc genes were detected via polymerase chain reaction assay."

Distribution and Antibiotics Resistance Pattern of Community-Acquired Methicillin-Resista... — PubMed (NCBI E-utilities), 2022

- **M17 medium**

Low · score 2.79 · 1 source

"The medium and related incubation conditions (SPY) was compared with 2 other protocols, M17 and ST: sensitivity was assessed by parallel cultivation of 55 strains of S. salivarius subsp. thermophilus, and selectivity by (i) parallel cultivation of 60 strains belonging to 20 different non-target species and sub-species and (ii) isolating bacteria from 3 raw-milk cheeses."

Evaluation of a new culture medium for the enumeration and isolation of Streptococcus sal... — PubMed (NCBI E-utilities), 2021

- **Tryptic soy broth (TSB)**

Low · score 2.25 · 1 source

"This paper also reports on a comparison of the productivity and selectivity of trypticase soy broth with 10% NaCl and 1% sodium pyruvate (PTSBS) with trypticase soy broth (TSB) for the isolation of S. aureus."

Media used in the detection and enumeration of Staphylococcus aureus. — PubMed (NCBI E-utilities), 1995

- **Nutrient broth**

Low · score 1.62 · 1 source

"Two clinical isolates of Staphylococcus aureus in nutrient broth, with or without human serum, were exposed to teicoplanin (50 mg/L) and, either immediately or after 30 min, inoculated into blood culture bottles."

Effect of teicoplanin on isolation of Staphylococcus aureus from blood culture media. — PubMed (NCBI E-utilities), 1999

- **MacConkey agar**

Low · score 1.55 · 1 source

"Root canal samples from infected or necrotic primary teeth were aseptically collected and cultured on blood, chocolate, and MacConkey agar."

Phenotypic Detection of Antimicrobial Resistance Patterns in Microorganisms Isolated From... — Europe PMC, 2026

- **Thioglycollate broth**

Low · score 0.93 · 1 source

"The organism grew on aerobic blood agar but not on anaerobic media or thioglycollate broth."

Septic arthritis due to <i>Corynebacterium propinquum</i>; first report of is... — Europe PMC, 2026

- **MRS agar/broth**

Low · score 0.93 · 1 source

"Results LAB strains were isolated from traditional fermented dairy products in Menoufia, Egypt, including Kareish cheese, Rayeb milk, and local yoghurt, using MRS agar medium."

Antimicrobial and antibiofilm activities of culture filtrates from Lactiplantibacillus pl... — Europe PMC, 2025

2 Optimum temperature for growth

low confidence

42 °C

Low · score 9.66 · 1 source

"(A) Growth curves of clinical bacterial isolates at 37 °C and 42 °C (E. coli CCUG17620, E. coli NCTC13441), or with and without vitamin B12 supplement (S. aureus CCUG35600 at 42 °C)."

Increased growth temperature and vitamin B12 supplementation reduces the lag time for rap... — PubMed Central (open access), 2023

"(A) Growth curves of clinical bacterial isolates at 37 °C and 42 °C (E. coli CCUG17620, E. coli NCTC13441), or with and without vitamin B12 supplement (S. aureus CCUG35600 at 42 °C)."

Increased growth temperature and vitamin B12 supplementation reduces the lag time for rap... — PubMed Central (open access), 2023

"We can conclude that incubation at 42 °C, along with vitamin B12 supplement, reduces the t lag in S. aureus NCTC8325."

Increased growth temperature and vitamin B12 supplementation reduces the lag time for rap... — PubMed Central (open access), 2023

37 °C

Moderate · score 4.76 · 3 sources

"(A) Growth curves of clinical bacterial isolates at 37 °C and 42 °C (E. coli CCUG17620, E. coli NCTC13441), or with and without vitamin B12 supplement (S. aureus CCUG35600 at 42 °C)."

Increased growth temperature and vitamin B12 supplementation reduces the lag time for rap... — PubMed Central (open access), 2023

"(A) Growth curves of S. aureus NCTC8325 were obtained in three-factorial designs; at 37 °C and 42 °C inoculum sizes 0.05% and 0.5 %, with and without vitamin B12."

Increased growth temperature and vitamin B12 supplementation reduces the lag time for rap... — PubMed Central (open access), 2023

"Optimal culture conditions for EH1 included 48 h incubation at 37 °C, pH 7.0, with yeast extract and sucrose as the preferred nitrogen and carbon sources, respectively."

Antimicrobial and antibiofilm activities of culture filtrates from *Lactiplantibacillus* pl... — Europe PMC, 2025

4 °C

Low · score 2.4 · 1 source

"We investigated the effect of nasal mucus and mucin on the growth and survival of two *Staphylococcus aureus* strains in liquid Amies transport medium at room temperature and 4 °C for 14 days."

Carry-over of host nutrients during sampling enhances undesired growth of *Staphylococcus* ... — PubMed (NCBI E-utilities), 2019

"These findings underscore that microbiological samples from humans and animals should be stored at 4 °C until analysis to avoid undesired *S. aureus* growth."

Carry-over of host nutrients during sampling enhances undesired growth of *Staphylococcus* ... — PubMed (NCBI E-utilities), 2019

33 °C

Low · score 1.22 · 1 source

"Our results revealed that 20 % sucrose, 3.5 % sodium chloride, 750-1000 U penicillin and 33 °C were optimal conditions for L-form formation."

Conditions and mutations affecting *Staphylococcus aureus* L-form formation. — PubMed (NCBI E-utilities), 2015

3 Time required to grow

high confidence

24-48 h

High · score 18.23 · 7 sources

"The 90-variable Cellpose framework supports 24-48 h cultures from nutrient-rich media as optimal for reliable Gram stain-based identification and laboratory quality assurance."

Incubation time and culture medium affect gram staining accuracy: A Cellpose image analys... — Europe PMC, 2026

"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*."

Screening for nasal carriage of methicillin resistant *Staphylococcus aureus* among healthc... — Zenodo, 2018

"After 48 h of incubation, 89, 72, and 78% of the MRSA strains were isolated on MRSA ID, CHROMagar MRSA, and ORSAB, respectively."

Development and evaluation of a chromogenic agar medium for methicillin-resistant Staphyl... — PubMed (NCBI E-utilities), 2004

1-6 h

High · score 17.5 · 7 sources

"This form of gastroenteritis is self-limiting, characterized by vomiting and diarrhea 1-6 hours after ingestion of the toxin, with recovery in 8-24 hours."

Staphylococcus aureus — Wikipedia, 2026

"All cultures in BHI broth were incubated at 37 °C or 42 °C under shaking conditions for up to 6 h, whereas blood cultures were cultivated for 12 h."

Increased growth temperature and vitamin B12 supplementation reduces the lag time for rap... — PubMed Central (open access), 2023

"PCR was performed to confirm the presence of *E. coli* CCUG17620 DNA and human DNA in samples taken at 3 h, 6 h, 9 h, and 12 h of incubation at 37 °C and 42 °C."

Increased growth temperature and vitamin B12 supplementation reduces the lag time for rap... — PubMed Central (open access), 2023

8-24 h

High · score 15.82 · 6 sources

"This form of gastroenteritis is self-limiting, characterized by vomiting and diarrhea 1-6 hours after ingestion of the toxin, with recovery in 8-24 hours."

Staphylococcus aureus — Wikipedia, 2026

"CHROMagar *Staph. aureus* (CSA) is a new chromogenic medium for presumptive identification of *Staphylococcus aureus* as mauve colonies after 24 h of incubation."

Evaluation of CHROMagar *Staph. aureus*, a new chromogenic medium, for isolation and presum... — PubMed (NCBI E-utilities), 2000

"All *S. aureus* isolates yielded mauve colonies after 24 h of incubation at 37 degrees C, while CoNS isolates grew as blue, white, or beige colonies."

Evaluation of CHROMagar *Staph. aureus*, a new chromogenic medium, for isolation and presum... — PubMed (NCBI E-utilities), 2000

18-24 h

High · score 11.37 · 6 sources

"To identify the bacterial isolates, the clinical samples were inoculated on blood agar media plates first and incubated at 37 °C for 18-24 h."

Molecular Characterization of Community- and Hospital- Acquired Methicillin-Resistant Sta... — PubMed (NCBI E-utilities), 2023

"CHROMagar Staph. aureus (CSA) is a new chromogenic medium for presumptive identification of Staphylococcus aureus as mauve colonies after 24 h of incubation."

Evaluation of CHROMagar Staph. aureus, a new chromogenic medium, for isolation and presum... — PubMed (NCBI E-utilities), 2000

"All S. aureus isolates yielded mauve colonies after 24 h of incubation at 37 degrees C, while CoNS isolates grew as blue, white, or beige colonies."

Evaluation of CHROMagar Staph. aureus, a new chromogenic medium, for isolation and presum... — PubMed (NCBI E-utilities), 2000

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

"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."

Conditions and mutations affecting Staphylococcus aureus L-form formation. — PubMed (NCBI E-utilities), 2015

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

Low · score 1.09 · 1 source

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

Detection, Identification and Diagnostic Characterization of the Staphylococcal Small Col... — PubMed (NCBI E-utilities), 2023

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

Low · score 1.09 · 1 source

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

Unusual predominance of <i>Staphylococcus aureus</i> in the salivary microbiome of chil... — Europe PMC, 2026

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

"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 ."

Screening for nasal carriage of methicillin resistant Staphylococcus aureus among healthc... — Zenodo, 2018

5 Gram character

high confidence

Gram-positive

High · score 54.56 · 7 sources

"An optimized staining technique for the detection of Gram positive and Gram negative bacteria within tissue.."

An optimized staining technique for the detection of Gram positive and Gram negative bact... — PubMed (NCBI E-utilities), 2016

"A modified Gram stain was developed and tested as an alternative to Gram stain that improves the contrast between Gram positive bacteria, Gram negative bacteria and host tissue."

An optimized staining technique for the detection of Gram positive and Gram negative bact... — PubMed (NCBI E-utilities), 2016

"The modified Gram stain clearly identified both Gram positive and Gram negative bacteria, and when compared to H&E or Gram stain alone provided excellent contrast between bacteria and non-viable burn eschar."

An optimized staining technique for the detection of Gram positive and Gram negative bact... — PubMed (NCBI E-utilities), 2016

Gram-negative

High · score 42.64 · 3 sources

"An optimized staining technique for the detection of Gram positive and Gram negative bacteria within tissue.."

An optimized staining technique for the detection of Gram positive and Gram negative bact... — PubMed (NCBI E-utilities), 2016

"A modified Gram stain was developed and tested as an alternative to Gram stain that improves the contrast between Gram positive bacteria, Gram negative bacteria and host tissue."

An optimized staining technique for the detection of Gram positive and Gram negative bact... — PubMed (NCBI E-utilities), 2016

"The modified Gram stain clearly identified both Gram positive and Gram negative bacteria, and when compared to H&E or Gram stain alone provided excellent contrast between bacteria and non-viable burn eschar."

An optimized staining technique for the detection of Gram positive and Gram negative bact... — PubMed (NCBI E-utilities), 2016

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

"We conducted a preliminary study with 100 *S. aureus* and 45 coagulase-negative *Staphylococcus* (CoNS) stock isolates plated on CSA."

Evaluation of CHROMagar Staph. aureus, a new chromogenic medium, for isolation and presum... — PubMed (NCBI E-utilities), 2000

• Antibiotic susceptibility profile

High · score 28.76 · 7 sources

"Finally, at the step, MIC values of 20 (47%) hVISA isolates reduced to 2 µg/mL after sub culturing for the gradient test."

Investigation of heteroresistant vancomycin intermediate *Staphylococcus aureus* among MRSA... — PubMed (NCBI E-utilities), 2021

• Catalase

High · score 12.77 · 5 sources

"Culture on CSA was then prospectively compared to a conventional laboratory method, i.e. , culture on 5% horse blood agar (HBA), catalase test, and latex agglutination test (HBA-catalase-latex), for isolation and presumptive identification of *S. aureus* from 2,000 consecutive clinical samples."

Evaluation of CHROMagar Staph. aureus, a new chromogenic medium, for isolation and presum... — PubMed (NCBI E-utilities), 2000

• Haemolysis pattern — reported positive

Moderate · score 7.76 · 6 sources

"Only *S. haemolyticus* produced dark gray-to-black colonies on MSOT similar to those of MRSA."

Evaluation of a mannitol-salt-oxacillin-tellurite medium for the isolation of methicillin... — PubMed (NCBI E-utilities), 1992

• VITEK 2

Moderate · score 6.65 · 2 sources

"The organism was identified using the VITEK® 2 Compact system (bioMérieux, Marcy l'Étoile, France), which enables rapid and accurate identification of rare, fastidious, or atypical organisms like *R. gilardii* by utilizing an extensive biochemical database and automated card-based technology, further enhancing diagnostic precision where conventional methods may be inconclusive."

Unveiling the Uncommon: *Roseomonas gilardii* Bacteremia in a 10-Month Infant Presenting Wi... — Europe PMC, 2025

• Pigment production

Low · score 3.8 · 3 sources

"Mutants lacking carotenoid production were distinguished from wild-type *S. aureus* and other strain variants."

Drug-Resistant *Staphylococcus aureus* Strains Reveal Distinct Biochemical Features with Ra... — PubMed (NCBI E-utilities), 2018

• Lecithinase (egg yolk)

Low · score 3.28 · 1 source

"Lecithinase activity on the medium 'Baird-Parker dry agar Base' and mannitol fermentation on the medium 'Vogel-Johnson dry agar Base' in the preliminary phenotypic test allow the isolation and differentiation of clinical isolates of *S. aureus* from *S. epidermidis*, and *S. saprophyticus*."

Clinical trials of new culture media for staphylococcus isolation. — PubMed (NCBI E-utilities), 2021

• Lipase

Low · score 2.71 · 2 sources

"*S. epidermidis* possesses lipolytic activity to digest skin surface lipids into the smallest unit of fatty acids (FAs)."

Antimicrobial effect of coconut oil on *Staphylococcus aureus*: an implication of Staphyloc... — OpenAIRE Explore, 2022

• MALDI-TOF MS

Low · score 1.48 · 1 source

"Initial synovial fluid cultures were negative; however, enrichment using aerobic blood culture bottles, followed by subculture, yielded *C. propinquum* identified by MALDI-TOF MS."

Septic arthritis due to <i>Corynebacterium propinquum</i>; first report of is... — Europe PMC, 2026

- 16S rRNA gene sequencing

Low · score 1.48 · 1 source

"Materials and methods The strain *E. faecium* SWUN5732 was isolated and identified using morphological characterization and 16S rRNA gene sequencing."

Probiotic potential of *Enterococcus faecium*; SWUN5732 isolated from yak... — Europe PMC, 2026

- Aerotolerance test — reported negative

Low · score 1.47 · 2 sources

"It is a Gram-positive, non-motile, and facultative anaerobic bacteria."

Staphylococcus aureus in cow milk: Prevalence, antibiotic resistance and hygiene implicat... — Zenodo, 2024

- DNase — reported positive

Low · score 1.09 · 1 source

"Furthermore, for differentiation on the species level, catalase (positive for all *Staphylococcus* species), coagulase (fibrin clot formation, positive for *S. aureus*), DNase (zone of clearance on DNase agar), lipase (a yellow color and rancid odor smell), and phosphatase (a pink color) tests are all done."

Staphylococcus aureus — Wikipedia, 2026

7 References

- Microbiological quality assessment of potential pathogenic bacteria and multidrug resistance patterns in commercial electrolyte drinks in Dhaka, Bangladesh. 2026
MED:42228720 doi:10.1371/journal.pone.0336888 · via Europe PMC · supported: Gram character, Biochemical tests for identification
- Incubation time and culture medium affect gram staining accuracy: A Cellpose image analysis study. 2026
MED:42119791 doi:10.1016/j.mimet.2026.107546 · via Europe PMC · supported: Media used, Time required to grow
- Bacteriological Profile and Antibioqram of Culture-Confirmed Orthopaedic Wound Infections in a Tertiary Care Hospital. 2026
MED:42078300 doi:10.7759/cureus.107998 · via Europe PMC · supported: Biochemical tests for identification, Gram character
- Phenotypic Detection of Antimicrobial Resistance Patterns in Microorganisms Isolated From the Primary Molars of Pediatric Dental Patients Undergoing Pulp Therapy. 2026
MED:42064530 doi:10.7759/cureus.106128 · via Europe PMC · supported: Biochemical tests for identification, Media used, Gram character
- Probiotic potential of *Enterococcus faecium*; SWUN5732 isolated from yak yogurt: integrated *in vitro* and *in vivo* evaluation for yak health. 2026
MED:42245445 doi:10.14202/vetworld.2026.1581-1594 · via Europe PMC · supported: Biochemical tests for identification
- Hand Phlegmons: Clinical Burden, Microbiological Spectrum, and Predictors of Surgical Complexity. 2026
MED:42510048 doi:10.3390/diagnostics16142184 · via Europe PMC · supported: Gram character
- Septic arthritis due to *Corynebacterium propinquum*: first report of isolation from synovial fluid in a native joint. 2026
MED:41853106 doi:10.1128/asmcr.00138-25 · via Europe PMC · supported: Biochemical tests for identification, Media used
- Unusual predominance of *Staphylococcus aureus* in the salivary microbiome of children with Early Childhood Caries in Kano, Nigeria 2026
PPR:PPR1267853 doi:10.64898/2026.03.05.26347684 · via Europe PMC · supported: Colony morphology, Biochemical tests for identification
- Diagnostic Accuracy of the Biofire FilmArray Blood Culture Identification 2 (BCID2) for Bloodstream Infections in Limpopo, South Africa. 2026
MED:42273392 doi:10.2147/idr.s575283 · via Europe PMC · supported: Biochemical tests for identification, Gram character
- Histotripsy Treatment of Microbial Biofilms in Clinical Urinary Catheters: A Pilot Study 2026
PPR:PPR1278961 doi:10.1099/acmi.0.001284.v1 · via Europe PMC · supported: Gram character
- Impact of Xpert® MRSA/SA blood culture PCR test on antimicrobial utilization at a large teaching hospital. 2026
MED:42378733 doi:10.1016/j.diagmicrobio.2026.117535 · via Europe PMC · supported: Time required to grow
- Caballeronia Bacteremia in Children with Cancer, United States. 2026
MED:42230339 doi:10.3201/eid3206.260342 · via Europe PMC · supported: Gram character
- pH stability during fermentation is associated with sustained antibacterial metabolite production in marine sediment *Bacillus* species. 2026
MED:41848287 doi:10.1128/aem.02595-25 · via Europe PMC · supported: Time required to grow
- Nasal Carriage of *Staphylococcus Aureus* and Methicillin- Resistant *Staphylococcus Aureus* Among Food Handlers in a Nigerian University Setting: Prevalence, Antimicrobial Resistance Profiles, and Determinants of Colonization 2026
PPR:PPR1280156 · via bioRxiv / medRxiv (via Europe PMC) · supported: Biochemical tests for identification, Media used
- Isolation of Methicillin-resistant *Staphylococcus Aureus* From Bovine Mastitis in Sebeta Town, Ethiopia 2026
PPR:PPR1286330 · via bioRxiv / medRxiv (via Europe PMC) · supported: Biochemical tests for identification
- Beyond Respiration: Heme A Synthase (CtaA) Orchestrates Hydrogen Sulfide Production and Virulence via Metabolic Reprogramming in *Staphylococcus aureus* 2026
PPR:PPR1291963 · via bioRxiv / medRxiv (via Europe PMC) · supported: Biochemical tests for identification
- Molecular Detection of *mecA* and *mecC* Genes in Urinary *Staphylococcus aureus* Isolates From Pregnant Women: Implications for Methicillin Resistance Screening 2026
zenodo:18504666 · via Zenodo · supported: Biochemical tests for identification
- Staphylococcus aureus* 2026
wikipedia:118212 · via Wikipedia · supported: Gram character, Biochemical tests for identification, Media used, Colony morphology, Time required to grow

19. **Antimicrobial and antibiofilm activities of culture filtrates from *Lactiplantibacillus plantarum* isolated from traditional dairy products in Menoufia, Egypt.** 2025
MED:41241733 doi:10.1186/s12866-025-04404-7 · via Europe PMC · supported: Media used, Biochemical tests for identification, Optimum temperature for growth, Time required to grow
20. **Unveiling the Uncommon: *Roseomonas gilardii* Bacteremia in a 10-Month Infant Presenting With Febrile Seizure.** 2025
MED:40777703 doi:10.7759/cureus.87503 · via Europe PMC · supported: Gram character, Biochemical tests for identification
21. **Preparation and validation of skim milk-based method for preservation of bacterial strain at resource-limited setup.** 2025
MED:40547784 doi:10.4103/jfmpc.jfmpc_1626_24 · via Europe PMC · supported: Gram character
22. **Aggregation and biofilm formation of mono- and co-culture *Candida* species and *Staphylococcus aureus* are affected by nutrients in growth media.** 2025
PMID:40528537 · via PubMed (NCBI E-utilities) · supported: Media used
23. **A Tertiary Care Hospital's Antimicrobial Sensitivity Pattern and Microorganism Spectrum.** 2025
MED:41522923 doi:10.4103/jpbs.jpbs_1272_25 · via Europe PMC · supported: Gram character
24. **Understanding Nigeria's antibiotic resistance crisis among neonates and its future implications** 2025
00034af344d24ef590b54527f56pc · via DOAJ · supported: Gram character
25. **Two new species of *Penicillium* (Eurotiales, Aspergillaceae) and the first record of *P. danzhouense* from mangrove sediment in Thailand, with notes on antibacterial activity** 2025
000f999c33f144f3bf49a3edea0584ac · via DOAJ · supported: Gram character
26. **Oritavancin as sequential therapy for Gram-positive bloodstream infections** 2024
00072b40db7d4ed9aed1206bcfe94737 · via DOAJ · supported: Gram character
27. **Effects of cosmetic ingredients on growth and virulence factor expression in *Staphylococcus aureus*: a comparison between culture medium and *in vitro* skin model medium** 2024
doi:10.3934/microbiol.2025002 · via Crossref · supported: Media used
28. **Phytogenic Synthesis of Cuprous and Cupric Oxide Nanoparticles Using Black jack Leaf Extract: Antibacterial Effects and Their Computational Docking Insights** 2024
00128dba874a4c969ee49ac5f9cbdef7 · via DOAJ · supported: Biochemical tests for identification
29. ***Staphylococcus aureus* in cow milk: Prevalence, antibiotic resistance and hygiene implications** 2024
zenodo:13725212 · via Zenodo · supported: Gram character, Biochemical tests for identification, Media used
30. **A Study on Methicillin Resistant *Staphylococcus Aureus* Carriage in Medical Students before and after Exposure to Hospital Environment** 2024
zenodo:11408805 · via Zenodo · supported: Time required to grow, Media used
31. **Biochemical And Molecular Analysis of *Staphylococcus Aureus* Clinical Isolates from Hospitalized Patients** 2024
zenodo:14592552 · via Zenodo · supported: Biochemical tests for identification
32. **Increased growth temperature and vitamin B12 supplementation reduces the lag time for rapid pathogen identification in BHI agar and blood cultures** 2023
PMC10133824 · via PubMed Central (open access) · supported: Media used, Time required to grow, Optimum temperature for growth
33. **Simple and Rapid Discrimination of Methicillin-Resistant *Staphylococcus aureus* Based on Gram Staining and Machine Vision.** 2023
PMID:37395643 · via PubMed (NCBI E-utilities) · supported: Gram character, Time required to grow, Biochemical tests for identification
34. **Molecular Characterization of Community- and Hospital- Acquired Methicillin-Resistant *Staphylococcus aureus* Isolates during COVID-19 Pandemic.** 2023
PMID:36671358 · via PubMed (NCBI E-utilities) · supported: Media used, Time required to grow, Biochemical tests for identification
35. **Detection, Identification and Diagnostic Characterization of the *Staphylococcal* Small Colony-Variant (SCV) Phenotype.** 2023
PMID:37760742 · via PubMed (NCBI E-utilities) · supported: Colony morphology
36. **The Clinical Significance of *Staphylococcus aureus* Small Colony Variants.** 2023
PMID:36226897 · via PubMed (NCBI E-utilities) · supported: Biochemical tests for identification
37. **Comparative Evaluation of Mic by E-Test, Chrom Agar MeReSa and Cefoxitin Disc Diffusion for Detection of Methicillin Resistant *Staphylococcus Aureus* (MRSA)** 2023
zenodo:11049040 · via Zenodo · supported: Biochemical tests for identification
38. **Evaluation of Phenotypic and Genotypic Test Methods to Detect Methicillin Resistant *Staphylococcus Aureus*** 2023
zenodo:12789957 · via Zenodo · supported: Biochemical tests for identification
39. **Distribution and Antibiotics Resistance Pattern of Community-Acquired Methicillin-Resistance *Staphylococcus aureus* in Southwestern Nigeria.** 2022
PMID:34357586 · via PubMed (NCBI E-utilities) · supported: Media used, Biochemical tests for identification
40. **Structural and Biochemical Characterization of *Staphylococcus aureus* Cysteine Desulfurase Complex SufSU.** 2022
PMID:36506149 · via PubMed (NCBI E-utilities) · supported: Gram character
41. **Sensitivity and Specificity of a Novel Colony Characteristic for Determination of Methicillin-Resistant *Staphylococcus aureus*.** 2022
PMID:35865434 · via PubMed (NCBI E-utilities) · supported: Time required to grow, Biochemical tests for identification
42. **Evaluation of a new culture medium for the enumeration and isolation of *Streptococcus salivarius* subsp. *thermophilus* from cheese.** 2021
PMID:33397607 · via PubMed (NCBI E-utilities) · supported: Media used
43. **Clinical trials of new culture media for *staphylococcus* isolation.** 2021
PMID:33734646 · via PubMed (NCBI E-utilities) · supported: Media used, Biochemical tests for identification
44. **Investigation of heteroresistant vancomycin intermediate *Staphylococcus aureus* among MRSA isolates.** 2021
PMID:33571150 · via PubMed (NCBI E-utilities) · supported: Media used, Biochemical tests for identification

45. **Antibacterial Biodegradable Films Based on Alginate with Silver Nanoparticles and Lemongrass Essential Oil-Innovative Packaging for Cheese** 2021
0007792d8c3b40258ba4f364ff1cfeec · via DOAJ · supported: Gram character
46. **Isolation and production of organic solvent tolerant protease from bacterial burn infection, Staphylococcus aureus KP091274.** 2021
PMID:34817325 · via PubMed (NCBI E-utilities) · supported: Time required to grow
47. **An Investigation of Potential Health Risks from Zoonotic Bacterial Pathogens Associated with Farm Rats** 2020
000c06dc828f4c0db2b2ccbf62358e · via DOAJ · supported: Time required to grow, Biochemical tests for identification
48. **A Novel Peptide Antibiotic Produced by Streptomyces roseoflavus Strain INA-Ac-5812 With Directed Activity Against Gram-Positive Bacteria** 2020
00030c03e8ba48a3888c0f3ba43b7477 · via DOAJ · supported: Gram character, Biochemical tests for identification
49. **Evaluation of behavior, growth, and swarming formation of Escherichia coli and Staphylococcus aureus in culture media modified with silver nanoparticles.** 2020
PMID:32926998 · via PubMed (NCBI E-utilities) · supported: Media used
50. **Carry-over of host nutrients during sampling enhances undesired growth of Staphylococcus aureus in liquid Amies transport medium.** 2019
PMID:30098850 · via PubMed (NCBI E-utilities) · supported: Optimum temperature for growth, Time required to grow
51. **Usefulness of sputum gram stain for etiologic diagnosis in community-acquired pneumonia: a systematic review and meta-analysis.** 2019
PMID:31077143 · via PubMed (NCBI E-utilities) · supported: Gram character
52. **DIAGNÓSTICO E CARACTERIZAÇÃO BACTERIANA DA MASTITE SUBCLÍNICA EM DUAS PROPRIEDADES LEITEIRAS DA REGIÃO NORTE CENTRAL DO PARANÁ** 2019
0011188b544a47b0b6ea981789f311c5 · via DOAJ · supported: Biochemical tests for identification
53. **Drug-Resistant Staphylococcus aureus Strains Reveal Distinct Biochemical Features with Raman Microspectroscopy.** 2018
PMID:29845863 · via PubMed (NCBI E-utilities) · supported: Biochemical tests for identification
54. **Screening for nasal carriage of methicillin resistant Staphylococcus aureus among healthcare workers at a Rural Teaching Hospital in Medchal District, Telangana** 2018
zenodo:8401427 · via Zenodo · supported: Media used, Optimum temperature for growth, Time required to grow, Colony morphology, Gram character, Biochemical tests for identification
55. **Staphylococcus Aureus Pigment Bio Colour as a Novel Antibacterial Agent Against Staphylococcus Aureus Isolate from Coins** 2018
zenodo:3588099 · via Zenodo · supported: Media used, Gram character, Biochemical tests for identification
56. **An optimized staining technique for the detection of Gram positive and Gram negative bacteria within tissue.** 2016
PMID:27071769 · via PubMed (NCBI E-utilities) · supported: Gram character
57. **Optimized In Vitro Antibiotic Susceptibility Testing Method for Small-Colony Variant Staphylococcus aureus** 2016
PMC4775967 · via PubMed Central (open access) · supported: Media used
58. **Conditions and mutations affecting Staphylococcus aureus L-form formation.** 2015
PMID:25361600 · via PubMed (NCBI E-utilities) · supported: Optimum temperature for growth, Colony morphology, Gram character
59. **Impact of culture media and sampling methods on Staphylococcus aureus aerosols.** 2015
PMID:25250674 · via PubMed (NCBI E-utilities) · supported: Media used
60. **Selective cultivation and rapid detection of Staphylococcus aureus by computer vision.** 2014
PMID:24517232 · via PubMed (NCBI E-utilities) · supported: Media used, Time required to grow
61. **A role for the DtxR family of metalloregulators in gram-positive pathogenesis.** 2014
PMID:24034418 · via PubMed (NCBI E-utilities) · supported: Gram character
62. **Penetration of antibiotics through Staphylococcus aureus and Staphylococcus epidermidis biofilms** 2010
https://openalex.org/W2162924609 · via OpenAlex · supported: Media used, Time required to grow
63. **Bactericidal effect of iron oxide nanoparticles on Staphylococcus aureus** 2010
https://openalex.org/W2153844978 · via OpenAlex · supported: Time required to grow
64. **Staphylococcus aureus CcpA Affects Virulence Determinant Production and Antibiotic Resistance** 2006
https://openalex.org/W2101610216 · via OpenAlex · supported: Gram character, Colony morphology, Biochemical tests for identification
65. **Canadian Patterns of Antimicrobial Resistance: Overview of Current Trends Related to Hospital Pathogens** 2006
0012aafb151f486f92fc97f157f4a184 · via DOAJ · supported: Gram character
66. **Very low ethanol concentrations affect the viability and growth recovery in post-stationary-phase Staphylococcus aureus populations.** 2006
PMID:16597967 · via PubMed (NCBI E-utilities) · supported: Time required to grow
67. **Staphylococcus aureus Deficient in Lipidation of Prelipoproteins Is Attenuated in Growth and Immune Activation** 2005
https://openalex.org/W2128294325 · via OpenAlex · supported: Gram character
68. **Development and evaluation of a chromogenic agar medium for methicillin-resistant Staphylococcus aureus.** 2004
PMID:15472303 · via PubMed (NCBI E-utilities) · supported: Time required to grow
69. **Evaluation of CHROMagar Staph. aureus, a new chromogenic medium, for isolation and presumptive identification of Staphylococcus aureus from human clinical specimens.** 2000
PMID:10747148 · via PubMed (NCBI E-utilities) · supported: Time required to grow, Biochemical tests for identification, Media used
70. **Rapid identification of Staphylococcus epidermidis.** 2000
PMID:10843049 · via PubMed (NCBI E-utilities) · supported: Biochemical tests for identification
71. **Effect of teicoplanin on isolation of Staphylococcus aureus from blood culture media.** 1999
PMID:10350393 · via PubMed (NCBI E-utilities) · supported: Media used
72. **Impact of the resin blood culture medium on the treatment of critically ill patients.** 1996
PMID:8706456 · via PubMed (NCBI E-utilities) · supported: Time required to grow

73. **Media used in the detection and enumeration of Staphylococcus aureus.** 1995
PMID:7662517 · via PubMed (NCBI E-utilities) · supported: Media used
74. **[Isolation of Staphylococcus aureus by the Baird Parker method from powdered milk].** 1994
openaire · via OpenAIRE Explore · supported: Media used, Time required to grow, Biochemical tests for identification
75. **Evaluation of a mannitol-salt-oxacillin-tellurite medium for the isolation of methicillin-resistant Staphylococcus aureus from contaminated sources.** 1992
PMID:1582165 · via PubMed (NCBI E-utilities) · supported: Biochemical tests for identification, Colony morphology
76. **Selective medium containing fosfomycin, nalidixic acid, and culture supernatant of Rhodococcus equi for isolation of Corynebacterium pseudotuberculosis.** 1991
PMID:1796687 · via PubMed (NCBI E-utilities) · supported: Colony morphology
77. **Regulation of Staphylococcal Enterotoxin B 1** 1969
PMC249895 · via PubMed Central (open access) · supported: Biochemical tests for identification
78. **COMPARISON OF SEVERAL SELECTIVE MEDIA FOR ISOLATION AND DIFFERENTIATION OF COAGULASE-POSITIVE STRAINS OF STAPHYLOCOCCUS AUREUS.** 1964
PMID:14131367 · via PubMed (NCBI E-utilities) · supported: Biochemical tests for identification, Media used
79. **Water Relations of Staphylococcus Aureus At 30°C** 1953
<https://openalex.org/W2178682063> · via OpenAlex · supported: Optimum temperature for growth
80. **Bacteriophage typing of *staphylococcus aureus*** 1952
<https://openalex.org/W2125676272> · via OpenAlex · supported: Media used
81. **Sensitivity and specificity of nanopore sequencing for detection of methicillin-resistant Staphylococcus aureus and methicillin-resistant Staphylococcus epidermidis in blood culture sample**
doi:10.58837/chula.the.2023.600 · via Crossref · supported: Biochemical tests for identification, Gram character

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.