

CULTURE PROFILE

Staphylococcys aureus

31 evidence sentences · 12 sources

UNREVIEWED — not verified by a microbiologist

At a glance

1	Media used	Brain heart infusion (BHI); Todd-Hewitt broth	low
2	Optimum temperature for growth	No evidence retrieved	none
3	Time required to grow	90 d	low
4	Colony morphology	Organoleptic characteristics (appearance, color, odor, taste), physicochemical properties (pH, density, consistency, rheological, abrasiveness, weight loss, and surface roughness) and antimicrobial...	low
5	Gram character	Gram-negative	low
6	Biochemical tests for identification	Catalase	low

1 Media used

low confidence

• Brain heart infusion (BHI)

Low · score 5.07 · 1 source

"Here, we reconstituted a skin model using keratin as a base (instead of callus) and compared it with brain heart infusion (BHI) medium."

Effects of cosmetic ingredients on growth and virulence factor expression in <i>Staphylococcus aureus</i> — Crossref, 2024

• Todd-Hewitt broth

Low · score 0.65 · 1 source

"Most of the phages can be propagated in fluid media as well as on agar, and for some glucose-peptone-water is a better medium than nutrient or Todd-Hewitt broth."

Bacteriophage typing of staphylococcus aureus — OpenAlex, 1952

2 Optimum temperature for growth

no evidence

No sentence in the retrieved literature supported this field. Nothing is asserted here.

3 Time required to grow

low confidence

90 d

Low · score 2.33 · 1 source

"Organoleptic Characteristics and Physico-Chemical Properties The organoleptic characteristics were classified as "normal" with no changes at the initial time (day 0) and after 15, 30, 60 and 90 days."

Effectiveness of Oil-Based Denture Dentifrices-Organoleptic Characteristics, Physicochemical Properties and Antimicrobial Activity — PubMed Central (open access), 2021

"Organoleptic Characteristics and Physico-Chemical Properties After the dentifrices were obtained, the organoleptic characteristics were evaluated in time intervals of 15, 30, 60, and 90 days after their initial assessment [20]."

Effectiveness of Oil-Based Denture Dentifrices-Organoleptic Characteristics, Physicochemical Properties and Antimicrobial Activity — PubMed Central (open access), 2021

"18 After completion of treatment, all patients were followed up every 3 months in the first year, every 6 months in the second year and yearly thereafter."

Surgical management of chronic osteomyelitis: Organisms, recurrence and treatment outcome — PubMed Central (open access), 2023

6 wk

Low · score 1.55 · 1 source

"Post-operatively, single antibiotic was given intravenously for a period of 1 week, selected from pre-operative culture and modified as per-intraoperative culture, after which single and sensitive oral antibiotic was administered for the next 5 weeks (to make 6 weeks of total duration)."

Surgical management of chronic osteomyelitis: Organisms, recurrence and treatment outcome — PubMed Central (open access), 2023

"These patients were kept on non-weight bearing for the next 6 weeks, after which gradual weight bearing was started."

Surgical management of chronic osteomyelitis: Organisms, recurrence and treatment outcome — PubMed Central (open access), 2023

1 wk

Low · score 1.45 · 1 source

"Post-operatively, single antibiotic was given intravenously for a period of 1 week, selected from pre-operative culture and modified as per-intraoperative culture, after which single and sensitive oral antibiotic was administered for the next 5 weeks (to make 6 weeks of total duration)."

Surgical management of chronic osteomyelitis: Organisms, recurrence and treatment outcome — PubMed Central (open access), 2023

"The Miswak sample macerated in petroleum ether was macerated for 21 days because after 7 days very negligible amount of extract was obtained."

Detection of antibacterial activities of Miswak , Kalonji and Aloe vera against oral path... — PubMed Central (open access), 2017

2-3 d

Low · score 0.78 · 1 source

"The purpose of this examination was to decide on the antibiotic therapy in the first 2 - 3 days after surgical debridement (till reports of culture from sequestrum are available)."

Surgical management of chronic osteomyelitis: Organisms, recurrence and treatment outcome — PubMed Central (open access), 2023

Sources disagree: "90 d" (score 2.33) versus "6 wk" (score 1.55). Both are shown; a reviewer should decide.

4 Colony morphology

low confidence

Organoleptic characteristics (appearance, color, odor, taste), physicochemical properties (pH, density, consistency, rheological, abrasiveness, weight loss, and surface roughness) and antimicrobial (Hole-Plate Diffusion-HPD)/anti-biofilm (Colony Forming Units-CFU) action against Staphylococcus aureus , Streptococcus mutans, and Candida albicans were evaluated.

Low · score 1.09 · 1 source

"Organoleptic characteristics (appearance, color, odor, taste), physicochemical properties (pH, density, consistency, rheological, abrasiveness, weight loss, and surface roughness) and antimicrobial (Hole-Plate Diffusion-HPD)/anti-biofilm (Colony Forming Units-CFU) action against Staphylococcus aureus , Streptococcus mutans, and Candida albicans were evaluated."

Effectiveness of Oil-Based Denture Dentifrices-Organoleptic Characteristics, Physicochemi... — Europe PMC, 2021

Organoleptic characteristics (appearance, color, odor, taste), physicochemical properties (pH, density, consistency, rheological, abrasiveness, weight loss, and surface roughness) and antimicrobial (Hole-Plate Diffusion-HPD)/anti-biofilm (Colony Forming Units-CFU) action against Staphylococcus aureus, Streptococcus mutans, and Candida albicans were evaluated.

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Effectiveness of Oil-Based Denture Dentifrices-Organoleptic Characteristics, Physicochemi... — OpenAlex, 2021

5 Gram character

low confidence

Gram-negative

Low · score 4.48 · 3 sources

"Methods Five-day-old (nurses) and fifteen-day-old (foragers) honey bees were treated with CLD, control liposomes, phosphate-buffered saline, injection wound (sham), or left untreated, then exposed at either 32 °C or 22 °C and challenged with the Gram-negative bacterium, Escherichia coli , or the Gram-positive bacterium, Staphylococcus aureus ."

Clodronate Liposomes Untangle the Role of Hemocytes in Apis mellifera Response to Tempera... — PubMed Central (open access), 2026

"Methods Five-day-old (nurses) and fifteen-day-old (foragers) honey bees were treated with CLD, control liposomes, phosphate-buffered saline, injection wound (sham), or left untreated, then exposed at either 32 °C or 22 °C and challenged with the Gram-negative bacterium, Escherichia coli, or the Gram-positive bacterium, Staphylococcus aureus."

Clodronate Liposomes Untangle the Role of Hemocytes in *Apis mellifera* — Europe PMC, 2026

"The major pathological responses to Gram-negative bacterial sepsis are triggered by endotoxin or lipopolysaccharide."

E5531, a synthetic non-toxic lipid A derivative blocks the immunobiological activities ... — OpenAlex, 1999

Gram-positive

Low · score 3.97 · 3 sources

"In sample A 93.54% of the reads were classified as Gram-positive bacteria, while in sample B this proportion was only 40.54%."

Antimicrobial resistance genes in raw milk for human consumption — PubMed Central (open access), 2020

"Methods Five-day-old (nurses) and fifteen-day-old (foragers) honey bees were treated with CLD, control liposomes, phosphate-buffered saline, injection wound (sham), or left untreated, then exposed at either 32 °C or 22 °C and challenged with the Gram-negative bacterium, Escherichia coli, or the Gram-positive bacterium, Staphylococcus aureus."

Clodronate Liposomes Untangle the Role of Hemocytes in *Apis mellifera* Response to Temperature Variation and Microbial Infection — PubMed Central (open access), 2026

"Methods Five-day-old (nurses) and fifteen-day-old (foragers) honey bees were treated with CLD, control liposomes, phosphate-buffered saline, injection wound (sham), or left untreated, then exposed at either 32 °C or 22 °C and challenged with the Gram-negative bacterium, Escherichia coli, or the Gram-positive bacterium, Staphylococcus aureus."

Clodronate Liposomes Untangle the Role of Hemocytes in *Apis mellifera* — Europe PMC, 2026

Sources disagree: "Gram-negative" (score 4.48) versus "Gram-positive" (score 3.97). Both are shown; a reviewer should decide.

6 Biochemical tests for identification

low confidence

• Catalase

Low · score 2.43 · 3 sources

"Antioxidant activity was evaluated through Catalase and Superoxide dismutase assay and anti-proliferative activity was evaluated through 3-(4, 5-Dimethylthiazol-2-yl)-2,5-Diphenyltetrazolium Bromide assay."

Detection of antibacterial activities of Miswak, Kalonji and Aloe vera against oral pathogens & anti-proliferative activity against cancer cell line — PubMed Central (open access), 2017

7 References

1. Clodronate Liposomes Untangle the Role of Hemocytes in *Apis mellifera* Response to Temperature Variation and Microbial Infection 2026
PMC12900532 · via PubMed Central (open access) · supported: Gram character
2. Clodronate Liposomes Untangle the Role of Hemocytes in *Apis mellifera* Response to Temperature Variation and Microbial Infection. 2026
MED:41505358 doi:10.1159/000550255 · via Europe PMC · supported: Gram character
3. 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
4. Surgical management of chronic osteomyelitis: Organisms, recurrence and treatment outcome 2023
PMC10388580 · via PubMed Central (open access) · supported: Time required to grow
5. Effectiveness of Oil-Based Denture Dentifrices-Organoleptic Characteristics, Physicochemical Properties and Antimicrobial Action 2021
PMC8300610 · via PubMed Central (open access) · supported: Time required to grow
6. Effectiveness of Oil-Based Denture Dentifrices-Organoleptic Characteristics, Physicochemical Properties and Antimicrobial Action. 2021
MED:34356734 doi:10.3390/antibiotics10070813 · via Europe PMC · supported: Colony morphology
7. Antimicrobial resistance genes in raw milk for human consumption 2020
PMC7198526 · via PubMed Central (open access) · supported: Gram character
8. Detection of antibacterial activities of Miswak, Kalonji and Aloe vera against oral pathogens & anti-proliferative activity against cancer cell line 2017
PMC5433005 · via PubMed Central (open access) · supported: Biochemical tests for identification, Time required to grow
9. Detection of antibacterial activities of Miswak, Kalonji and Aloe vera against oral pathogens & anti-proliferative activity against cancer cell line. 2017
MED:28506259 doi:10.1186/s12906-017-1778-0 · via Europe PMC · supported: Biochemical tests for identification
10. E5531, a synthetic non-toxic lipid A derivative blocks the immunobiological activities of lipopolysaccharide 1999
https://openalex.org/W1965417417 · via OpenAlex · supported: Gram character, Time required to grow
11. Bacteriophage typing of *Staphylococcus aureus* 1952
https://openalex.org/W2125676272 · via OpenAlex · supported: Media used

12. Fig. 2. Growth curve of a bacterial culture K2-2 in a liquid VD medium with sodium acetate and without an organic substrate for 2.5 days. OD - optical density culture
doi:10.17816/ecogen50901-37212 · via Crossref · supported: Time required to grow

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.