

# CAMP test

**The CAMP test** is used to differentiate between beta-hemolytic streptococci. It allows us to distinguish *Streptococcus agalactiae* from *Streptococcus pyogenes*. *S. aureus* and *Streptococcus agalactiae* or *Streptococcus pyogenes* lines are crossed on blood agar. Each of these three bacteria causes beta-hemolysis.

Overview of substances produced by individual bacteria: *S. aureus* produces beta-hemolysin and *Streptococcus agalactiae* produces the so-called CAMP factor. *Streptococcus pyogenes* does not produce CAMP factor.

If we cross the *S. aureus* line with the *Streptococcus agalactiae* line, the substances they produce will interact - beta-hemolysin and CAMP factor will interact. This interaction causes the hemolysis zone to enlarge. A bow-shaped clarification occurs at the site of interaction. Thus, the interaction of *Streptococcus pyogenes* and *S. aureus* does not, of course, increase the hemolysis zone.

The name is derived from the names of the discoverers - Christie, Atkins, Munch-Petersen.

## Results:

- positive - *Streptococcus agalactiae*,
- negative - *Streptococcus pyogenes*.



Positive result of the culture CAMP test. In this case, *Streptococcus agalactiae*. Vertical inoculation line *Staphylococcus aureus*.

Negative CAMP test result. Test strain *Streptococcus pyogenes*, inoculation line *Staphylococcus aureus*.

CAMP test inverse result. Test strain *Rhodococcus equi*. Vertical inoculation line *Staphylococcus aureus*.

## Links

### Related Articles

- Bacitracin test
- Catalase test
- Plasma coagulase test
- Optochin test

### References

- ŠMÍROVÁ, Václava. *Introduction to medical microbiology*. - edition. -.
- BEDNÁŘ, M, V FRAŇKOVÁ and J SCHINDLER, et al. *Medical microbiology - bacteriology, virology, parasitology*. 1st edition. Prague: Marvil, 1996. 558 pp. ISBN 80-238-0297-6.
- TANKESHWAR ACHARYA,. *CAMP Test: Principle, Procedure and results: CAMP test* [online]. © 2013. [feeling. 2017-05-17]. < <https://microbeonline.com/camp-test-principle-procedure-results/> >.
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