SHORT DIRECTIONS FOR TAKING THE GARGLING SAMPLE

Please read these short directions carefully and use the explanatory video to see how to take the gargling sample. You will see the video when registering the test kits at **u** www.coronatest-hd.de/en/consent



 Take the sample before a meal and make sure you have not have eaten anything for at least 30 minutes beforehand. The ideal time is straight after getting up in the morning, before cleaning your teeth or having breakfast.

2. Wash your hands thoroughly with soap.

3. Lay out the three utensils: the tube for the sample, black straw, bottle with saline solution. In addition, have a sharp pair of scissors to hand.



4. Open the saline solution and pour it into your mouth. Gargle for at least 30 seconds. Then rinse the solution around your mouth several times. Carefully let the solution flow back into the bottle through the straw.

5. Bring up the liquid remaining in your throat with several strong pulls; collect all the remaining liquid in your mouth and spit it through the straw into the bottle. After that, cough vigorously, wrinkle your nose several times and spit this secretion into the bottle. Collect as much saliva as possible in your mouth and spit this too into the bottle.



6. Close the bottle tightly and shake it very hard for a total of 30 seconds. The solution in the bottle should now be very cloudy. If it is clear, spit vigorously into it once again.

- 7. Wash your hands thoroughly with soap.
- **8.** Now cut the tip of the bottle open with the scissors and pour the solution carefully into the small sample tube until it is almost full, but not quite. Carefully close the tube tight.



9. Throw away the bottle and straw. Wash the tube and your hands under the tap and keep it in the plastic bag until you deposit it in the collection box.

10. On the enclosed slip of paper, note your name and the date of the sampling; it is advisable to take a photo of it with your smartphone. Don't lose the slip of paper, as you will need it to access the results.



ZENTRUM FÜR MOLEKULARE BIOLOGIE

The new Covid-19 test procedure has been developed at the Center for Molecular Biology of Heidelberg University (ZMBH) under the leadership of Prof. Dr Michael Knop and Dr Simon Anders, in collaboration with the Center for Integrative Infectious Diseases Research (CIID) of the Heidelberg University Hospital and its area of virological diagnostics.¹ It is based on a gargle sample with a common salt solution. The first results indicate that the sensitivity of the Heidelberg test procedure roughly corresponds to the standard PCR tests currently being used for diagnostics and that it is far more sensitive than commercial antigen tests.² Individuals can frequently be identified as early as two or three days after being infected, before they really become infectious. In addition, the virus can be detected long after the infection. This makes the test particularly suited to uncovering infection chains and stopping the spread of the virus. The test was developed during the first wave of the pandemic (and was published in peer-reviewed journals).

The coronavirus test is an experimental test that has been approved only for research purposes (the ethics commission has submitted its opinion). The test laboratory is not accredited or approved for clinical diagnostics. A false positive or negative result is therefore possible. The test station cooperates with the Diagnostics Laboratory of the University Hospital and the health authority of the Rhine-Neckar District.

Team leaders

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¹ The test has no CE label yet and cannot be purchased in the EU at present.
² The test has a limit of detection (LoD) between CT from 33 to 35.





UNIVERSITÄT HEIDELBERG ZUKUNFT SEIT 1386

CORONAVIRUS TEST

CORONAVIRUS TEST INFORMATION ABOUT PARTICIPATION IN ON-CAMPUS LECTURES/CLASSES

The university will provide approved lectures/classes, such as practical classes that are strictly necessary for continuing or completing a degree course, with an additional protective measure during the coronavirus pandemic. In addition to observing the required hygiene routines and prescribed social distancing, participants can avail themselves of a coronavirus gargling test that was developed at the Center for Molecular Biology of Heidelberg University (ZMBH) in the context of a study. It aims to support the measures against the spread of the virus and possible new mutants in order to detect asymptomatic carriers of the virus and persons who have not yet developed symptoms, and to interrupt possible infection chains early on. For this purpose, the lecturers can order test kits for participants in lectures/classes. The test kits will then be evaluated for the presence of SARS-CoV-2 viruses in the experimental test station that the ZMBH has set up with the virology division in its area of virological diagnostics.

With the test, infections can be detected before symptoms arise. Participation in the test is voluntary. Whether a student takes part in the study or not will in no way impact negatively on their academic results.

The samples can be analysed within eight hours with the aid of a robotics platform and isothermal nucleic acid evidence. In order to make the tests possible for students participating in-campus classes (e.g. laboratory practicals) they need to sign up for the event and the lecturers or supervisors will make an appropriate number of test kits available. Those wishing to be tested need to register their kit online (www.uni-heidelberg.de/en/coronavirustest), thereby indicating their consent to participating in the study, which is pseudonymised. Contact details will be encrypted so that the test takes place anonymously. Participants can carry out the test to obtain the gargling sample at home, preferably straight after getting up in the morning before breakfast or cleaning their teeth. The samples will be collected and taken to the test station for evaluation. That very evening or during the next day, the results will be available and can be accessed online with the aid of an individual number (the pseudonym). Positive test results will be reported to the health authority, which will decrypt the contact details for contact tracing.

By decision of the Rectorate, the costs for the coronavirus test in the context of the on-campus lectures/classes and examinations will be covered from the central budget.

HOW CAN PARTICIPANTS AT ON-CAMPUS LECTURES/CLASSES TAKE THE CORONAVIRUS TEST?

So that participants and supervisors of on-campus lectures/classes who wish to be tested can do so, they have to receive test kits. Strictly necessary on-campus events are, in particular, practical classes and gross anatomy courses with differing, but known, numbers of participants. For the organisers of an on-campus lecture/class, the following procedure applies:

STEP ONE – approval of the class and procurement of the test kits

When applying for an on-campus lecture/class the organisers will note the number of participants on the form and name a person to fetch the test kits and return any excessive kits. The approval of the on-campus class means a registration for the coronavirus test. The organisers of on-campus lectures/classes that have already been approved will be contacted. Test kits corresponding to the approximate number of students attending the class will be handed out – one test per participant and week. At the same time, the person fetching the test kits will receive a collection box to collect the sample tubes **at INF 324, 4th floor, room 409, Monday to Friday, between 9 and 11am.** Non-used test kits should be returned to the same address (between 8am and 5pm).

STEP TWO – distributing the test kits and individual implementation

The organisers of the lecture/class are recommended to distribute the test kits to the students a few days before the class (if possible) or on the first day of in-person attendance and to collect them on the next day they are back on campus. The students can take the gargling sample in the morning of the first day of the lecture/class and deposit the samples in a collection box at the class, or in one of the two sample letter-boxes (Old Town and Im Neuenheimer Feld).

STEP THREE - registering and taking the gargling sample

The participants must register their at test

www.coronatest-hd.de/en/consent

with the enclosed access code, which has to be kept to access the result online. The test is anonymous. Please note the short directions for taking the gargling sample on the fold-in page of the flyer and the video at: https://vimeo.com/503040943/23fe603d6a

STEP FOUR - returning the sample tube for analysis

The participants at on-campus events can return the sample tube as follows:

- 1. Put it in the collection box available at the event. The organisers of the examination will take the collected sample tubes back to the test station at INF 324, 4th floor (between 9am and 5pm, leaving it on the table).
- 2. Alternatively, the participants can post their sample tubes themselves in the sample letter boxes, emptied several times a day from Monday to Friday, at two collection points:
 - Old Town: entrance area of the University Library, Plöck 107–109
 - Im Neuenheimer Feld: entrance area of the Theoretikum, INF 305 (near the Unishop)

The test samples submitted will be analysed on three days a week: Monday, Wednesday and Friday. Samples delivered on Tuesday will be analysed on Wednesday and those delivered on Thursday will be analysed on Friday. The test results will be available about eight hours after the sample has reached the test laboratory. If the samples are submitted on the morning of one of the three days set aside for analysis by 10am the results can be accessed the same day.

STEP FIVE – accessing the results

The test result will be accessible via an access code enclosed in the test kit at www.coronatest-hd.de/en/results

STEP SIX – contact tracing

Positive tests will be validated by a certified PCR test and reported to the health authority, according to the statutory requirement to notify it so that it can begin tracing contacts. To support the health authorities it is recommended that persons who have tested positive turn to the university's central team for COVID-19 reporting. There they will receive confidential advice and support: meldung.corona@uni-heidelberg.de