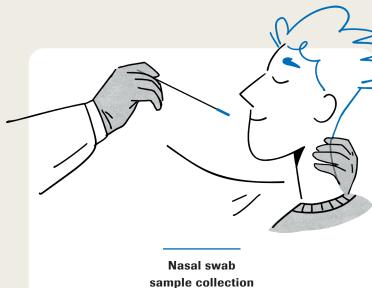


## SARS-CoV-2 Rapid Antigen Test Nasal



## Introducing the SARS-CoV-2 Rapid Antigen Test Nasal



 $\frac{90.6\%}{\text{Cet} \leq 30)}$ 

98.6 %

Specificity<sup>1</sup>





Decreased risk of exposure for healthcare professionals



Results after 15 min

## Convenient sampling, quick results





Pre-filled tubes

2



Target antigen Nucleocapsid (N)



Test stability
1 hour after
opened pouch



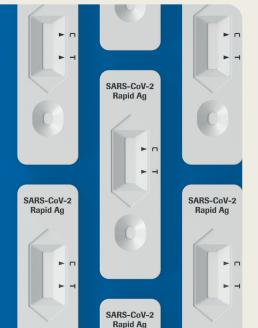
**Self-collection possible** under supervision of a healthcare worker

Less invasive point-of-care testing with increased protection for healthcare professionals

**Key benefit** 









Shelf life: 24 months after manufacturing date\*

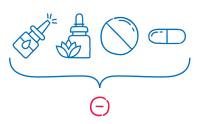


1× positive and negative QC included in the kit



Storage temperature

### Cross-reactivity



54 human-pathogenic specimens
 tested negative for cross-reactivity.\*\*
 15 potential substances
 tested negative for interference.

### Test description

The SARS-CoV-2 Rapid Antigen Test Nasal is a rapid chromatographic immunoassay for the qualitative detection of SARS-CoV-2 nucleocapsid antigen present in human nasal samples.

This assay is intended to detect antigen from SARS-CoV-2 in individuals suspected of COVID-19 or with known or suspected exposure to SARS-CoV-2. The test is intended for professional use in laboratory and point-of-care environments, or self-collection under the supervision of a healthcare worker.



<sup>\*</sup>Shelf life may be reduced for lots produced before April 2021.

<sup>\*\*</sup>Cross-reactivity is possible with human coronavirus HKU1 (31.6% homology), Pneumocystis jirovecii (PJP) (12.3% homology) and Mycobacterium tuberculosis (TB) (13.0% homology). MC--06888

The SARS-CoV-2 Rapid Antigen Test Nasal at your service

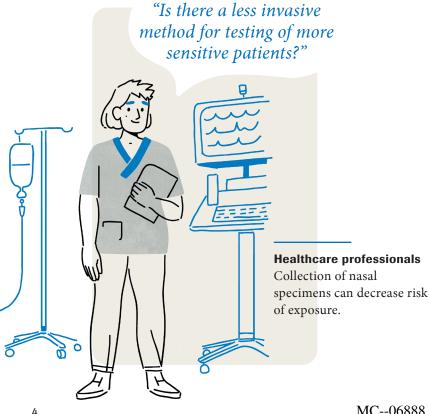


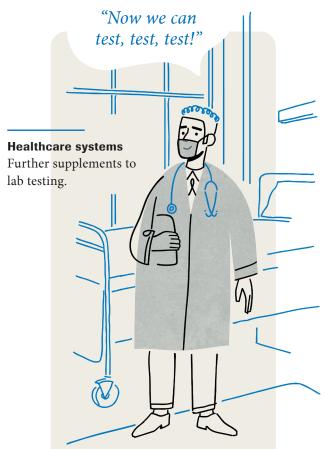


self-isolation.

"Do I need to

self-isolate?"





### The SARS-CoV-2 Rapid Antigen Test Nasal enables...

... fast decision-making to help prevent further spreading.

The SARS-CoV-2 Rapid Antigen Test Nasal provides rapid results for fast decision-making at the point of care.

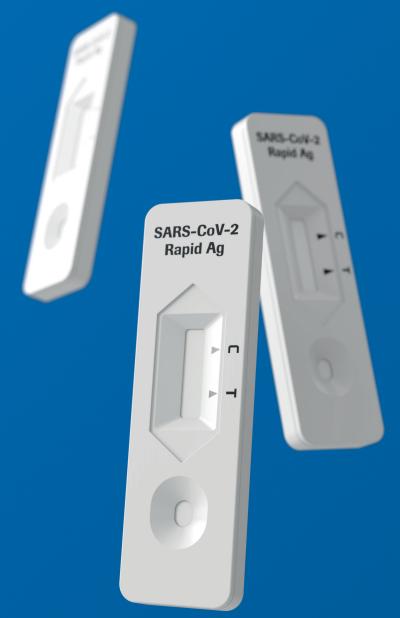
Decision-making on self-isolation for symptomatic patients or asymptomatic individuals with a known or suspected exposure to SARS-CoV-2 can help reduce the risk of passing on the virus. Infected patients who go into quarantine help to protect their contacts such as family, friends and co-workers.

As an additional option, rapid point-of-care tests can fill the gap if lab capacities are challenged by an exceptionally high demand for PCR testing. Point-of-care tests can also facilitate testing when traveling to a test location is not possible.

...nasal sampling for less patient discomfort and better protection for healthcare workers.

Nasal sampling can help reduce overall patient discomfort, particularly in sensitive individuals such as children, elderly people and /or people with disabilities.

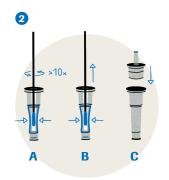
Besides being less invasive, the test also provides patients with the option to self-collect their nasal sample under the supervision of a healthcare worker. Through reduced physical contact, this method of testing can help decrease the risk of exposure to the virus for healthcare professionals.



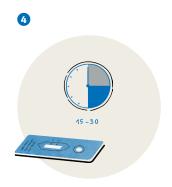
MC--06888 5

### Performing a test in 4 easy steps









### **Nasal swab collection**

Insert a sterile swab 2 cm into the patient's nostril with the most secretion. Rotate the swab 4 times for about 15 seconds against the nasal wall. Remove it from the nostril. Repeat procedure with the same swab in the other nostril.

### Prepare the sample

- A Insert the swab into an extraction buffer tube, squeeze the tube and stir the swab >10x.
- **B** Remove the swab while squeezing the sides of the tube.
- **C** Press the nozzle cap tightly onto the tube.

### **Drop of sample**

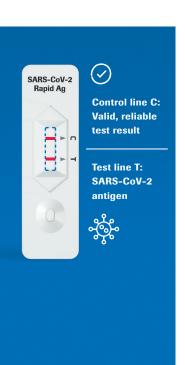
Add 4 drops of extracted sample to the specimen well of the test device.

### Read the test result in 15 – 30 min



Do not read test result after 30 minutes.

### Quick and easy to read



6



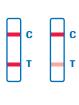
Positive



**Negative** 



Invalid



Individual has SARS-CoV-2 antigen present indicating active infection.

Positive results should not be used as the sole basis for treatment or patient management decisions, and should be considered in the context of the patient's recent exposures, history and the presence of clinical signs and symptoms consistent with COVID-19.



No SARS-CoV-2 antigen detected

A negative test result does not eliminate the possibility of SARS-CoV-2 infection, and should be confirmed by viral culture or a molecular assay or ELISA if necessary for patient management.

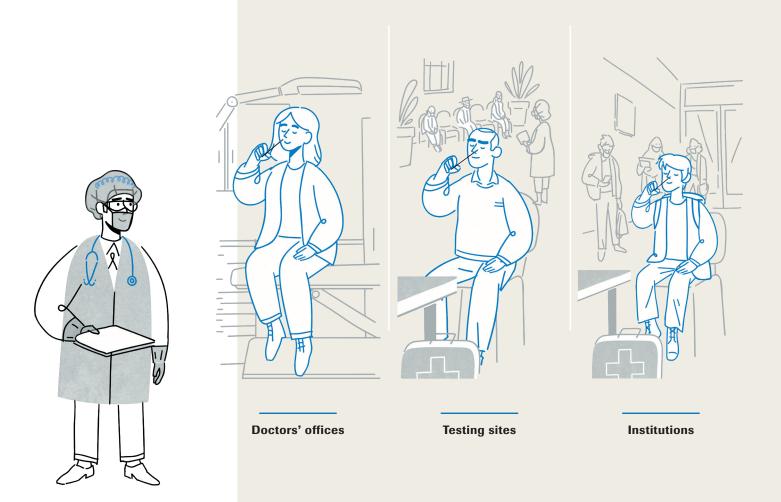


Result not valid Repeat with a new test.

# Do-it-yourself: supervised sample self-collection

The nasal sampling method simplifies the testing procedure, causes less discomfort for patients and offers more protection for healthcare workers.

Nasal swab samples may be self-collected by patients under supervision of a healthcare worker. Sensitive patients can feel more secure and in control of the procedure and frequent testing is made easier and more bearable.



MC--06888 7

## Performance compared to PCR tests

Direct detection of the virus – through nucleic acid and antigen testing – is essential to contain the virus and make further treatment as well as quarantine decisions.

**PCR tests** are intended for the qualitative detection of SARS-CoV-2 in nasopharyngeal and oropharyngeal swab samples from patients.<sup>2</sup>

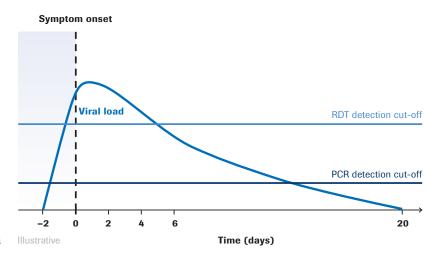
**Rapid antigen tests** detect the presence of a specific viral protein. A positive result requires a higher viral load than a PCR test for reliable antigen detection and a high test performance.

Centers for Disease Control and Prevention (CDC) recommend rapid antigen testing as diagnostic testing of individuals suspected of COVID-19 or with known or suspected exposure to SARS-CoV-2. (e.g. via contract tracing tools). The World Health Organisation (WHO) recommends screening of asymptomatics environments (institutions, carehomes, schools etc.) where PCR is not immediately available.<sup>3, 4, 5</sup>

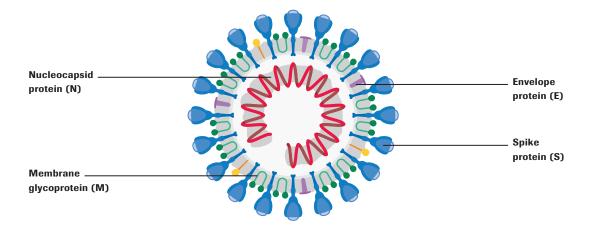
Both institutions recommend antigen testing within 5–7 days post symptom onset as during that time viral load is highest.<sup>3, 4, 5</sup>

PCR tests are considered the gold standard due to the highest analytical sensitivity on the market. However, SARS-CoV-2 rapid antigen tests support to trace infectious individuals in decentralized locations, especially when lab testing isn't available and time is of the essence.

### Clinical Sensitivity of a Rapid Test compared to PCR<sup>6</sup>



### Structure of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)<sup>7</sup>



### Summary of sample characteristics<sup>1</sup>

	Overall	HCP collection	Self-collection
N	468	179	289
Asymptomatic, n/N (%)	14/468 (3.0%)	<b>7/179</b> (3.9%)	7/289 (2.4%)
Symptomatic, n/N (%)	<b>454/468</b> (97.0 %)	<b>172/179</b> (96.1 %)	<b>282/289</b> (97.6%)
DPSO, median (range)	<b>4</b> (0 – 14)	<b>4</b> (1 –10)	<b>4</b> (0 – 14)
PCR positive, n/N (%)	<b>80/468</b> (17.1 %)	<b>41/179</b> (22.9 %)	<b>39/289</b> (13.5%)
PCR positive symptomatic, n/N (%)	<b>78/80</b> (97.5%)	<b>39/41</b> (95.1 %)	<b>39/39</b> (100%)
PCR positive asymptomatic, n/N (%)	<b>2/80</b> (2.5%)	<b>2/41</b> (4.9 %)	0/39 (0%)
PCR negative, n/N	388/468 (82.9%)	<b>138/179</b> (77.1 %)	<b>250/289</b> (86.5%)
PCR sample type	Combined OP/NP	Combined OP/NP	Combined OP/NP

### Performance overview<sup>1</sup>

For professionally collected samples, the test was found to have a sensitivity of 90.6 % (Ct  $\leq$  30) and a specificity of 98.6 %.\*\*\*

Sensitivity	Professional collection	Self-collection
<b>Ct ≤ 24,</b> (95% Cl), N	<b>100%</b> (78.2% –100%), 15	<b>95.7</b> % (78.1 % – 99.9 %), 23
<b>Ct ≤ 27,</b> (95% Cl), N	<b>92.6</b> % (75.7 % – 99.1 %), 27	<b>92.9%</b> (76.5% – 99.1%), 28
Ct ≤ 30, (95% CI), N	<b>90.6</b> % (75.0 % – 98.0 %), 32	<b>84.4</b> % (67.2 % – 94.7 %), 32
<b>Ct ≤ 33,</b> (95 % Cl), N	<b>88.2</b> % (72.5% – 96.7%), 34	<b>78.4 %</b> (61.8 % – 90.2 %), 37
All Ct values, (95% Cl), N	<b>80.5</b> % (65.1 % – 91.2 %), 41	<b>74.4%</b> (57.9% – 87.0%), 39
Specificity		
All Ct values, (95% Cl), N	<b>98.6 %</b> (94.9 % – 99.8 %), 138	<b>99.2</b> % (97.1 % – 99.9 %), 250

Limit of detection SARS-CoV-2 (2019-nCOV) NCCP 43326/2020

Concentration  $3.13 \times 10^{2.2} \text{ TCID}_{50}/\text{mL}$ 

**Dilution Ratio** 1/3200

## Your kit for convenient sampling with quick results

- → Results in 15 30 minutes
- → Less invasive and more convenient testing
- → Increased protection for healthcare workers



### Ordering information

				Roche	
Product	REF #	GTIN	Cat #	Material #	PZN (DE only)
Languages 1 – 8: Spanish, Portuguese, German, French, Italian, Dutch, Swedish, Turkish					
SARS-CoV-2 Rapid Antigen Test Nasal	9901-NCOV-03G	08809319398233	99COV33D-ML01	09365397023	1173555
Languages 9 – 16: English (CE), Hungarian, Czech, Polish, Russian, Norwegian, Danish, Finnish					
SARS-CoV-2 Rapid Antigen Test Nasal	9901-NCOV-03G	08809319398240	99COV33D-ML02	09365397043	/

### References

- 1 SARS-CoV-2 Rapid Antigen Test Nasal Method Sheet (V1, January 2021).
- 2 Wölfel, R. et al. (2020). Virological assessment of hospitalized patients with COVID-2019 581 (7809), 465 469.
- ${\it 3} \quad CDC. \ https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html.$
- 4 Criteria to Guide Evaluation and Laboratory Testing for COVID-19.
  Available at: https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html. Accessed Sept 11, 2020.
- 5 COVID-19 (Rapid) Antigen Testing Recommendations WHO update September 11th 2020.

  Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/
  technical-guidance-publications?publicationtypes=f85a3610-b102-4287-a6df-f3bc0b2e9f7c.
- 6 Huang, C et al. (2020). Lancet 395, 497-506.
- 7 Masters PS (2006). Advances in Virus Research. Academic Press. 6

MC--06888 11

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### Signature Page for MC--06888 v1.0

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Regulatory Approval	Deanne Chaney Regulatory 26-Feb-2021 13:49:01 GMT+0000
Medical Approval	Dusanka Kasapic Medical 01-Mar-2021 08:06:12 GMT+0000

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