







NANO TECHNOLOGY ADD FOR INNOVATION

SARS-CoV-2











Most people infected with the new coronavirus (SARS-CoV-2) contract the disease without showing any symptoms and continue to infect those they are in close contact with during this period. Testing for coronavirus can be done to people showing symptoms and anyone who has come into contact with them. The most common symptoms of SARS-CoV 2 or COVID-19 are fever, dry cough and shortness of breath.

We developed the BNG® COVID-19 RT-qPCR Detection Kit to detect Corona Virus.

BioNanoGen Technology Development Laboratories is one of the 10 companies in Turkey that develops kits, supported by TUBITAK, within the scope of the project to combat COVID-19. With the "BNG COVID-19 RT-qPCR Detection Kit" we have developed, we also have complementary rapid RNA isolation kits, RNA transport liquids and transport isolation kits. Our BNG COVID-19 test kit can detect SARS-CoV-2 virus multiplex with high sensitivity and specificity. Our laboratory has ISO 9001: Quality Management System and ISO 13485: Quality Management for Medical Devices standards. BNG COVID-19 RT-qPCR Detection Kit was produced with the support of TUBITAK. 300 samples were sent and tested in the Microbiology Reference Laboratory of the General Directorate of Public Health, and TITCK approval was obtained.



BNG® COVID-19 RT-qPCR Detection Kit:

Reagents	Quantity and Volume (100 tests)
BNG One Step Reaction Mix	1 x 1500 μL
Negative Control (NTC)	1 x 200 μL
Target Positive Control (TPC)	1 x 200 μl

Sample Isolation

The kit is applied to nucleic acid isolates from nasopharyngeal swab, oropharyngeal swab

Fast Protocols

Whole process can be completed in 64 minutes

High Quality and Yield

The analytical sensitivity of the kits 99.6% and its specificity is 100%

Clinical Test

The kit was applied to SARS-CoV-2 positive and negative 300 clinical samples

Detection

Limit of Detection (LoD) value is $10cp/\mu L$. The multiplex kit detects gene sequences of SARS-CoV-2: N/Orf1ab/RdRp/S/E and HEC: RNAseP/GAPDH

BNG® COVID-19 RT-qPCR Detection Kit Advantages & Features

- ✓ Primer&Probes designed SARS-CoV-2 Assay for virus identification
- ✓ Easy and fast detection by qPCR
- ✓ Inclusivity: SARS like Coronavirus and specific detection of SARS-CoV-2.
- ✓ Versatile:compatible with most used real-time PCR instruments.
- ✓ Avoid false negative results
- ✓ Two independent target in one tube
- ✓ The kit is a multiplex kit. It can perform both human extraction and COVID-19 test in the well.

Molecular testing of SARS-CoV-2 is carried out in 5 steps:

Step-1: Nasopharyngal Swab A sample is taken with a cotton swab and placed in the BNG Extraction solution. Step-2: Collected Sample
The sample is stored at 2-80 °C for up to 72 hours
or proceed to step 3 by continuing the RNA
extraction.





Step-3: Preparation for Experiment The experiment is prepared according to the amounts in the BNG protocol.

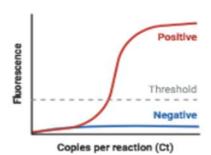




Step-4: RT-qPCR PCR temperature parameters are added and purified RNA is reverse transcribed into cDNA, amplified by qPCR.

Step-5: Results





PRODUCT LIST

CAT#	PRODUCTS	QUANTITY
BG035-50	BNG® Quick-RNA Isolation Kit	50 test
BG035-100	BNG® Quick-RNA Isolation Kit	100 test
BG036-50	BNG® Quick RNA Isolation and Molecular Transport Kit	50 test
BG036-100	BNG® Quick RNA Isolation and Molecular Transport Kit	100 test
BG037-100	BNG® COVID-19 RT-qPCR Detection Kit	100 test
BG037-500	BNG® COVID-19 RT-qPCR Detection Kit	500 test
BG038-100	BNG® COVID-19 RT-qPCR Detection Kit (For Mutant Screen)	100 test
BG039-1	BNG® SARS-CoV-2 Covid-19 Antigen Rapid Test Package Insert	1 test/ 5 test
BG039-2	BNG® SARS-CoV-2 Covid-19 Antigen Rapid Test Package Insert	10 test/ 20 test
BG040-1	BNG® COVID-19 Antigen Rapid Test Cassette (Saliva)	1 test/ 5 test
BG040-2	BNG® COVID-19 Antigen Rapid Test Cassette (Saliva)	10 test/ 20 test





This is to Certify that the

Medical Devices- Quality Management System

BİONANOGEN TEKNOLOJİ GELİŞTİRME SANAYİ VE TİCARET ANONİM SİRKETİ

ADATEPE MAH. 10 SK. NO:5 A BUCA / İZMİR / TÜRKİYE

has been independently assessed and is compliant with the requirements of

ISO 13485:2016

This Certificate is applicable to the following product or service ranges:

PRODUCTION AND SALES OF MEDICAL DIAGNOSIS KIT, CHIP AND SUB-DEVICE SYSTEMS

TIBBİ TANI KİTİ, ÇİP VE ALT CİHAZ SİSTEMLERİ ÜRETİMİ VE SATIŞI

:: Certificate No :: TR52924H

Date of initial registration

Date of this Certificate

25 July 2020

Surveillance audit on or before

24 July 2021

Recertification Due / Certificate expiry
This Certificate is property of Staunchly Management & 24 July 2023





MENT & SYSTEM SERVICES LTD.



BIONANOGEN TEKNOLOJI GELIŞTIRME SAN. VE TIC. A.S.

ADATEPE MAH. 10 SK. 5/A BUCA / IZMIR

DSR BELGELENDİRME tarafından denetlenmiş ve uygulamakta olduğu Kalite Yönetim Sisteminin

is audited by DSR Certification and applied Quality Management System meet the requirement

ISO 9001:2015

standardına aşağıdaki kapsamda uymakta olduğu gözlenmiştir standard for the following activities.

TIBBİ TANI KİTİ, ÇİP VE ALT CİHAZ SİSTEMLERİ ÜRETİMİ VE SATIŞI

Sertifika No / Certificate No: QMS-20.07.361

22.07.2020 Sertifika Son Basım Tarihi Certificate Last Issue Date

EA Kodu/EA 23

3 Yıl/Years Belgelendirme Periyodu Certification Period









DSR TEKNİK MUAYENE SERTİFİKASYON HİZ. LTD. ŞTİ. Sa. Helis Beyaz Ofis 271 A Blok No 207 PENDİK / İSTANBUL / TÜRKİYE Tel: +90 216 606 06 35 il: İnfoli'darbelgilendirme.com.tr - Welt. www.darbelgelendirme.com.tr



98/79/AT

IN VİTRO TIBBİ TANI CİHAZLARI YÖNETMELİĞİ

ÜRETİCİ ADI ÜNVAN REGULATION ON IN VITRO MEDICAL DIAGNOSTIC DEVICES

: BIONANOGEN TEKNOLOJÍ GELÍSTÍRME SANAYÍ VE TÍCARET A.Ş. : ADATÉPE MAHALLESÍ 10 SOKAK NO:5/A BUCA İZMİR

ÜRETİCİ FİRMA ADRESİ : +90232 440 62 46

: +90232 420 20 01

FAKS ; www.bionanogen.com.tr

; info@bionanogen.com.tr

ÜRÜN MARKASI / MODELI : 3NG

ÜRÜN ADI

STERİL OLMAYAN IN VITRO TIBBI TANI CİHAZI

: IN VİTRO TIBBİ TANI CİHAZLARI YÖNETMELİĞİ (98/79/AT)

: 64787

TS EN ISO13485:2016 TIBBİ CİHAZLAR KALİTE YÖNETİM SİSTEMİ TS EN ISO13485:2017 AC TIBBİ CİHAZLAR KALİTE YÖNETİM SİSTEMİ TS EN 14971-DI MEDİKAL CİHAZLAR KİSK PÖRETİM DYOLULAMALLARI TS EN 14971-DI MEDİKAL CİHAZLAR RİSK YÖNETİM UYCULAMALLARI TS EN ISO 1523-11 TİBBİ CİHAZ EİKKTERİRİNDE SUNLULCAK BİLGİ VE SEMBOLLER

: €

TEST STANDARDI

ÜRETİM YERİ ADRESİ

: ADATEPE MAHALLESI 10 SOKAK NO:5/A BUCA İZMİR : +90232 440 62 46

Production Place Address
ÜRETİM YERİ TELEFONU Production Place Phone ÜRETİM YERİ FAKSI

: +90232 420 20 01 : ADATEPE MAHALLESİ 10 SOKAK NO:S/A BUCA İZMİR

SERTIFIKA NO : 20.BNG-002 BELGELENDIRME TARIHI : 07.09.2020 BELGE GECERLILIK TARIHI : 06.09.2021



AT UYGUNLUK BEYANI

98/79/AT

IN VİTRO TIBBİ TANI CİHAZLARI YÖNETMELİĞİ

REGULATION ON IN VITRO MEDICAL DIAGNOSTIC DEVICES BIONANOGEN TEKNOLOJÍ GELÍSTÍRME SANAYÍ VE TÍCARET A.Ş.

ÜRETİCİ FİRMA AI : ADATEPE MAHALLESÍ 10 SOKAK NO:5/A BUCA İZMİR : +90232 440 62 46

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UYGUNLUK

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ÜRÜN MARKASI / MODELI :

Product Name ÜRÜN ÖZELLİĞİ

: BNG COVID-19 RT-qPCR Tespit Kiti : STERIL OLMAYAN IN VITRO TIBBI TANI CİHAZI

UYGUNLUK YÖNETMELİĞİ : IN VİTRO TIBBİ TANI CİHAZLARI YÖNETMELİĞİ (98/79/AT) : EKI

GMDN NO : 64787

TS EN ISO1348S-2016 TIBBÍ CHAZLAR KALÍTE YÖNETÍM SÍSTEMÍ TS EN S01348S-2017 AC TIBBÍ CHAZLAR KALÍTE YÖNETÍM SÍSTEMÍ TS EN 14971-DI MEDÍNAL CHAZLAR MISK DÉĞERLENDINGULAMALARI TS EN 14971-DI MEDÍNAL CHAZLAR BÍSK YÖNETÍM UYGULAMALARI TS EN 50 TS252-1 TIBBÍ CHAZ ETIKETERÍNBÖ SUNULACK BÍLGÍ VE SEMBOLLER

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TEST STANDARDI ÜRETİM YERİ ADRESİ : ADATEPE MAHALLESI 10 SOKAK NO:5/A BUCA İZMİR : +90232 440 62 46 ÜRETİM YERİ TELEFONU

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: 07.09.2020 Certification Date
BELGE GEÇERLİLİK TARİHİ : 06.09.2021







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This kit is made with the support of TUBITAK