

# ***DiaPlexQ***<sup>™</sup> Novel Coronavirus (2019-nCoV) Detection Kit

One-Step qRT-PCR based assay system  
for detection of SARS-CoV-2



**WHY CHOOSE SOLGENT  
FOR YOUR DETECTION KIT?**



## 1. Insufficient supply due to few numbers of production countries

- Only about 10 countries manufacture detection kits worldwide
- Most countries depend on import

## 2. Global supply shortage of detection kits

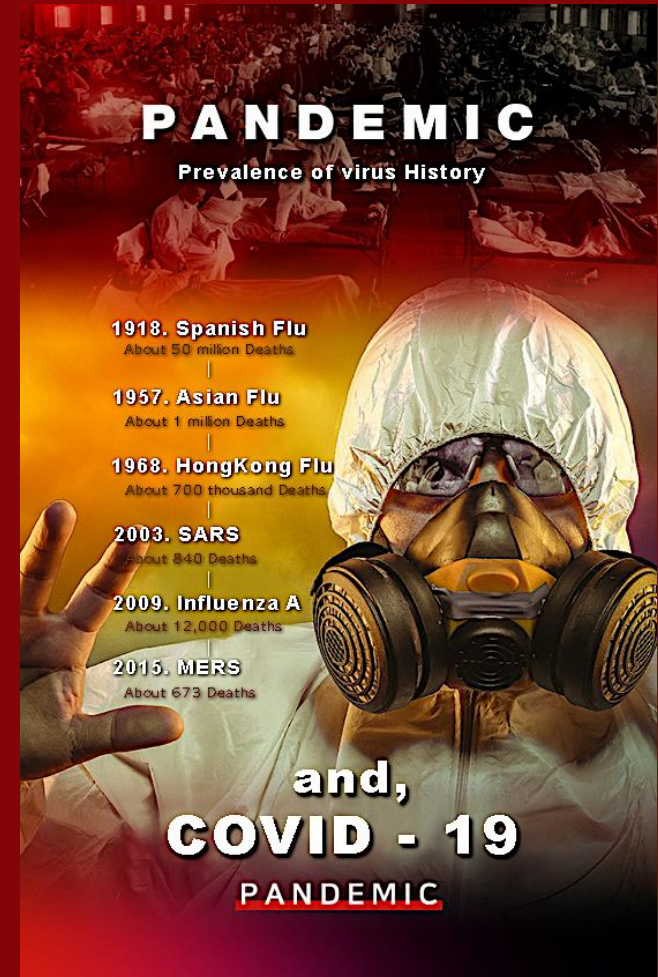
- Tests for symptoms are challenging due to lack of supply
- Shortcomings of diagnosis and quarantine measures
- Implementing detection kits ration : priority use for high-risk group

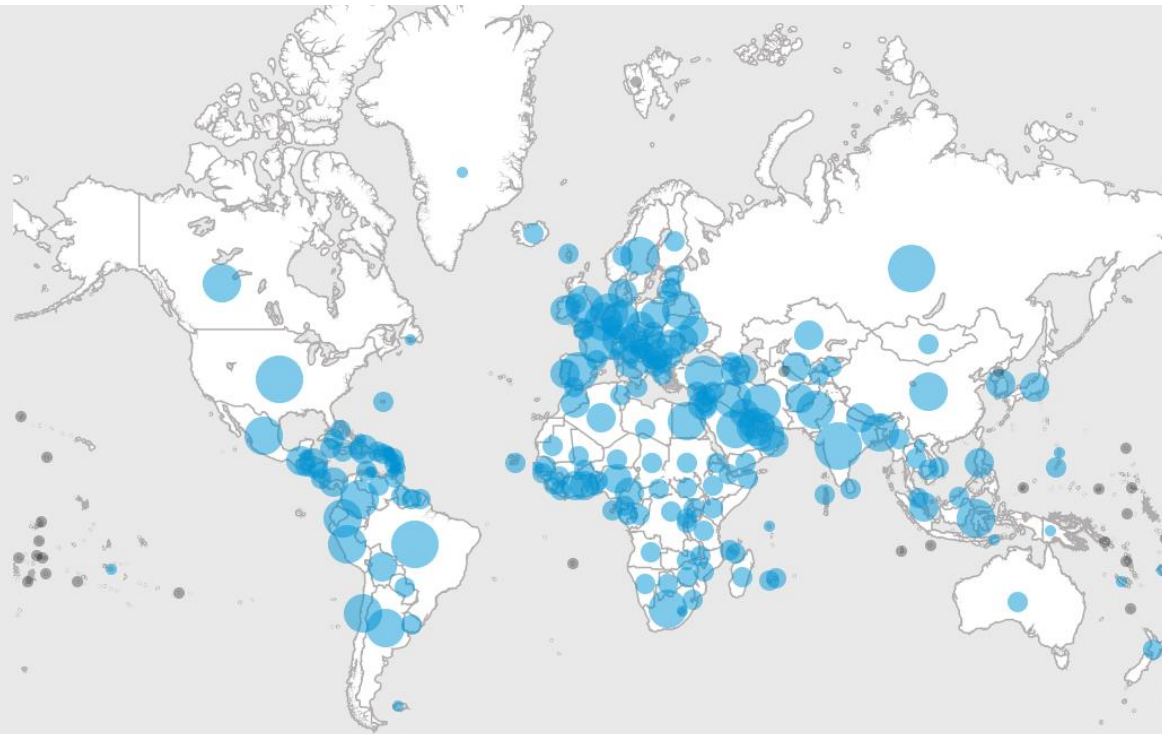
## 3. US CDC's detection kits show faulty results

- US CDC reputation for 74 years of history plunged. "even plain water tested positive to COVID-19"

## 4. Chinese detection kits, 'piles of faulty products'

- Over 50% of detection kit manufacturers worldwide is Chinese company
- Severely inaccurate results from contaminated reagents caused by poor management and production
- Chinese detection kits rejected overseas including Czech, Spain, Turkey, Philippines, UK, USA and others
  - Czech : 200,000 of faulty detection kits
  - Slovakia : 1.2 mil of faulty detection kits
  - Spain : Only 30% of accuracy showed by Chinese imported kits
  - Turkey : Only 35% of accuracy showed by Chinese imported kits
  - Italy : 75% of Chinese relief goods were defective
  - Netherlands : withdraw 600,000 of Chinese masks





Globally, as of 6:01pm CEST, 6 July 2020, there have been 11,327,790 confirmed cases of COVID-19, including 532,340 deaths, reported to WHO.

Supply of “SolGent COVID-19 Test Kit”  
is **urgent** worldwide

## DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit



### 1. Features

- Multiplex OneStep qRT-PCR
- Hot Start PCR system by using optimized Hot Start polymerase
- Commercial Real-time PCR Instrument available
- High specificity: simultaneous detection of **ORF1a and N gene**.

### 2. Detection Targets

- Simultaneous Detection of ORF1a / N gene
- CDC 2019-Novel Coronavirus (2019-nCoV) Real-time qRT-PCR Panel Primers and Probes
- High specific targets were selected based on the Chinese CDC and US CDC.

1. Kit HS Code : 3822.00.10

2. Kit Specification :

**-Size(mm) : 95 \* 55 \* 60 mm (3.7 \* 2.1 \* 2.3 inch)**

**-Weight(g) : 34 g (0.037 lb)**

3. kit require special storage : Required refrigeration

**-Storage Temperature(°C): -20°C ± 5°C (-4 ± 41 °F)**

4. Period of use: 1 year and 6 months

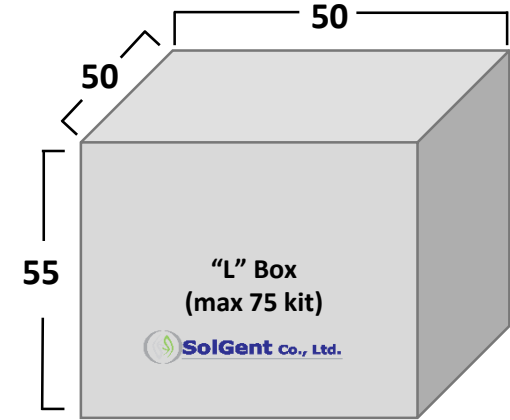
5. Real-time PCR time : 1 hour 45 minutes

# DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit

## 3. Packing Box specification by size

Packing Box	Packing Size	Gross Weight*	Net Weight (1kit)	Product Qty (kit)
SS	27*27*26 (Cm) 11*11*10 (inch)	6 (Kg) 13.2 (lb)	34 (g) 0.07 (lb)	minimum: 1 maximum: 6
S	37*32*32 (Cm) 15*13*13 (inch)	10 (Kg) 22 (lb)	34 (g) 0.07 (lb)	minimum: 7 maximum: 16
M	45*42*35 (Cm) 18*17*14 (inch)	18 (Kg) 39.6 (lb)	34 (g) 0.07 (lb)	minimum: 17 maximum: 30
L	50*50*55 (Cm) 20*20*22 (inch)	28 (Kg) 61.7 (lb)	34 (g) 0.07 (lb)	minimum: 31 maximum: 75

\* Box Dimension (cm)



\* Gross Weight with dry ice with ice pack

• 2 Types of refrigerant ("L" packing box standard)

1) Icepack: ~ MAX 75 Kit (for countries where dry ice is not allowed)

2) Icepack + dry ice: ~ MAX 100 Kit

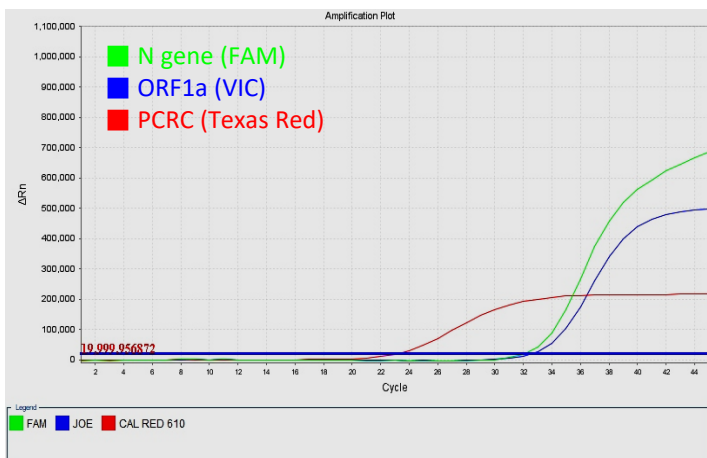
✂ It is recommended to use "Cold chain service" in countries with a delivery time of 5 days or more.



Ex) Total 1,500 kit (1,500,000 test) packing image  
(15 Boxes of 100 kits in Large box)

## DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit

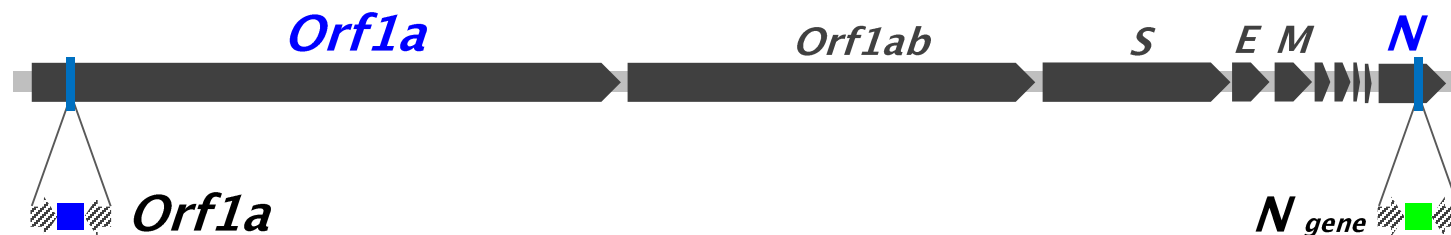
### Amplification Plot information



### Fluorescence information

Target	5' Fluorophore	3' Quencher
<b>N gene</b>	<b>FAM</b>	<b>BHQ1</b>
<b>ORF1a</b>	<b>VIC / JOE*</b>	<b>BHQ1</b>
<b>PCR control</b>	<b>Texas Red/ Cal Fluor Red 610*</b>	<b>BHQ2</b>

\*ABI 7500 / 7500 Fast: JOE, Texas Red | Bio Rad CFX96™: VIC, Cal Fluor Red 610



2019-nCoV Detection region 2 of SolGent

2019-nCoV Detection region 1 of SolGent

## DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit

### Interpretation of Results

Ct Value			Interpretation
N Gene	ORF1a	PCRC	
≤ 40	Any	Any	Positive
Any	≤ 40	Any	Positive
≤ 40	≤ 40	Any	Positive
> 40	None	Any	Inconclusive <sup>1</sup>
None	> 40	Any	Inconclusive <sup>1</sup>
> 40	> 40	Any	Inconclusive <sup>1</sup>
None	None	≤ 26	Negative
None	None	> 26 or None	Invalid <sup>2</sup>

#### Result Interpretation for Patient Samples

1 Repeat RT-PCR

2 Repeat extraction and RT-PCR

#### Note:

• Even if the target is detected (Ct ≤ 40) and the PCRC is not detected, the result is still valid because:

1. If the sample is high concentration, PCRC may not amplify.
2. If PCR inhibitors are present, the PCRC may not amplify.

• When the Non-Template Control test result is positive, all samples must be retested.

#### ※ PCRC (PCR Control)

Erroneous results may occur due to a variety of factors - for example, PCR mixture mix error, PCR condition error, PCR equipment use error etc. The PCR control is intended to monitor for the success of the PCR process. If the PCRC fails unexpectedly all experimental procedures and steps should be checked.

# DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit

## Certifications of DiaPlexQ™ Novel Corona Detection kit

제외 20-140 호

### 의료기기

구 분  제조 /  수입

명칭 (제품명, 품목명, 모델명) **솔젠트(주) DiaPlexQ™ Novel Corona Detection Kit**

보장 및 구조 **별첨**

원재료명 **별첨**

제조방법 **별첨**

성능 **별첨**

사용목적 **별첨**

사용방법 **별첨**

사용시 주의사항 **별첨**

포장단위 **별첨**

저장방법 및 사용기간 **별첨, 사용기간**

시험규격 **별첨**

제조(수입)업자 정보 **세종특별자치시 용성구 테크노**

허가조건 **없음**

소재지 **대전광역시 용성구 테크노**

비고 **수출용에 한함**

「의료기기법」 제15조 제15호 및 같은 법  
위와 같이 허가합니다.

식품의약품안전청

Osong Health Technology, Ltd.  
167 Osongsaengmyeong2-ro, Osong  
Seongju-si, Chungcheong  
Tel : +82-43-719-2396

No. of Certificate : 2020022773

### Certificate of Free Sales

Exporting(certifying) country : Republic of Korea  
Importing(requesting) country : Thailand

The Ministry of Food and Drug Safety, certifies that the following firm is a manufacturer of medical devices under the Medical Device Act and the following is permitted to be freely sold in overseas markets.

Manufacturer (Registered No. : 4010)  
SolGent Co., Ltd.

1F, 2F, 43-10, Techno 5-ro, Yuseong-gu, Daejeon

Product-License No. : Classification  
20-140 : IVD agents for detection of novel coronavirus (2019-nCoV) detection kit

Product Name : DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit

Registered List of Product Classification and Code

[질병관리본부 공고 제2020-204호]

신종코로나바이러스 유전자검출검사를 위한 검사  
긴급사용 승인 결과(3차)

질병관리본부 공고 제2020-90호(2020.01.28.)  
바이러스 유전자 검사시약 긴급사용 승인을 위한 평가 신청  
대한 결과를 다음과 같이 공고합니다.

2020년 02월 27일

※ 감염병 위기 상황 고려, 긴급사용 계통 선정 평가가  
(~2.28. 평가신청 분까지)

긴급사용 승인 제품(추가)

제품명	제조사	사용목적
DiaPlexQ™ Novel Coronavirus(2019-nCoV) Detection Kit	솔젠트(주)	호흡기 감염병 의심환자의 구인두 및 비인두 가검물에 바이러스(2019-nCoV)의 유전자(N gene)를 정량 검출하는 데 사용
STANDARD M nCoV Real-Time Detection Kit	에스앤에이(주)	호흡기 감염병 의심환자의 구인두 및 비인두 가검물에 바이러스(2019-nCoV)의 유전자(N gene)를 정량 검출하는 데 사용

형이 되는 영생 연구, 보건복지부

### 질병관리본부

수신 솔젠트 주식회사 (경유)  
제품 해외진단용 의료기기의 긴급사용 승인요청 검토결과 알림

1. 관련  
가. 솔젠트 주식회사 S20200204-001(2020.2.4.)호  
나. 식품의약품안전처 의료기기정책과-1636(2020.2.27.)호  
다. 식품의약품안전처 의료기기정책과-1642(2020.2.27.)호

2. 위 호와 관련하여 귀사의 요청에 따라 의료기기 긴급사용(허가면제) 신청제품의 적합성을 검토하고, 「의료기기법 시행령」 제13조의2 제1항 및 2항에 따라 식품의약품안전처로 긴급사용 승인을 요청한 바, 관련 결과를 아래와 알려드립니다.

**가. 업체명(제품명) : 솔젠트 주식회사(DiaPlexQ™ Novel Coronavirus Detection Kit)**

나. 사용목적 : 호흡기 감염병 의심 환자의 검체(격막, 구인두 및 비인두 가검물)에서 코로나19 바이러스(2019-nCoV)의 유전자(Orf1a gene, N gene)를 정성 검출하는 해외진단용 의료기기

**다. 긴급사용 요청 결과 : 승인**  
\* 포함사항 : 검체 전 세부 취급일 개시 및 주후 Out-off 설정 근거 포함 필요

라. 긴급사용 승인기간 : 2020. 2. 27. ~ 코로나바이러스감염증-19 유행 종료 시까지

붙.

DE/CA 70/4038-153776

### CERTIFICATE OF CONFORMITY

Yuseong-gu, Daejeon, 34014, Korea  
SolGent Co., Ltd.  
167 Osongsaengmyeong2-ro, Osong  
Seongju-si, Chungcheong  
32364-2000, gsh@solgent.com

CE IVD

Product Name : **DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit**  
Package Name : **SOD52-K100, SOD52-K020**

is not covered by Annex II and self-testing according to Directive 98/79/EC.  
with the applicable requirements of the following documents

Ref. No.  
EN ISO 15223-1:2016  
ISO 13485:2016  
EN 13612:2002  
EN ISO 17511:2003  
EN 12364:2015  
EN 13641:2002  
EN ISO 14971:2012  
EN ISO 18113-1:2011  
EN ISO 18113-2:2011  
IEC 62366-1:2015  
IEC 62366-2:2016

February, 2020 Signature: *Chamajong*

SolGent Co., Ltd.  
Solutions for Genetic Technologies  
SolGent Co., Ltd 02/2020 V2.0

15 and 30 Abs. 2 MPG  
d 30 (2) Medical Devices Act, MPG  
Diagnostic Medical Devices

Federal state  
Land  
Bezirk / Postal code  
19

fax / Fax  
+49 1 85011384

Systemnummer / Registration number  
CA70/4038-153776

Devices Act, MPG

Behandlungseinheiten nach § 10 Abs. 1 und 2  
d (1) and (2) Medical Devices Act, MPG  
V. m. § 4 Abs. 2 MPBetreibV  
Act, MPG in connection with § 4 (2) MPBetreibV  
n. § 10 Abs. 3 MPG  
§ 10 (3) Medical Devices Act, MPG

CFS of KFDA

Approved at third by KFDA-EUA  
(Issued on 27<sup>th</sup> Feb.2020)

CE-IVD  
(Issued on 27<sup>th</sup> Feb.2020)





## U.S FDA EUA (Issued on 21th May, 2020)



May 21, 2020

Do-Su Seok  
CEO of SolGent Co., Ltd.  
3F, 32, Techno 6-ro, Yuseong-gu  
Daejeon, 34014, South Korea

**Device:** DiaPlexQ Novel Coronavirus (2019-nCoV) Detection Kit  
**Company:** SolGent Co., Ltd.  
**Indication:** Qualitative detection of nucleic acid from SARS-CoV-2 in nasopharyngeal swabs, oropharyngeal (throat) swabs, anterior nasal swabs, mid-turbinate nasal swabs, nasal aspirates, nasal washes, bronchoalveolar lavage (BAL) fluid and sputum from individuals suspected of COVID-19 by their healthcare provider. Emergency use of this test is limited to authorized laboratories.

**Authorized Laboratories:** Laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, to perform high complexity tests.

Dear Do-Su Seok:

This letter is in response to your<sup>1</sup> request that the Food and Drug Administration (FDA) issue an Emergency Use Authorization (EUA) for emergency use of your product,<sup>2</sup> pursuant to Section 564 of the Federal Food, Drug, and Cosmetic Act (the Act) (21 U.S.C. §360bbb-3).

On February 4, 2020, pursuant to Section 564(b)(1)(C) of the Act, the Secretary of the Department of Health and Human Services (HHS) determined that there is a public health emergency that has a significant potential to affect national security or the health and security of United States citizens living abroad, and that involves the virus that causes COVID-19. Pursuant to Section 564 of the Act, and on the basis of such determination, the Secretary of HHS then declared that circumstances exist justifying the authorization of emergency use of in vitro diagnostics for detection and/or diagnosis of the virus that causes COVID-19 subject to the terms of any authorization issued under Section 564(a) of the Act.<sup>3</sup>

<sup>1</sup> For ease of reference, this letter will use the term "you" and related terms to refer to SolGent Co., Ltd.

<sup>2</sup> For ease of reference, this letter will use the term "your product" to refer to the DiaPlexQ Novel Coronavirus (2019-nCoV) Detection Kit used for the indication identified above.

<sup>3</sup> U.S. Department of Health and Human Services, *Determination of a Public Health Emergency and Declaration that Circumstances Exist Justifying Authorizations Pursuant to Section 564(b) of the Federal Food, Drug, and*

Letter of Authorization

# 3rd Company approved by S. Korea & U.S FDA-EUA

## FACT SHEET FOR HEALTHCARE PROVIDERS

DiaPlexQ COVID-19 Detection Kit - SolGent Co., Ltd. May 21, 2020

Coronavirus Disease 2019 (COVID-19)

This Fact Sheet informs you of the significant known and potential risks and benefits of the emergency use of the DiaPlexQ Novel Coronavirus (2019-nCoV) Detection Kit. The DiaPlexQ COVID-19 Detection Kit is authorized for use on respiratory specimens collected from individuals suspected of COVID-19 by their healthcare provider.

**All patients whose specimens are tested with this assay will receive the Fact Sheet for Patients: DiaPlexQ COVID-19 Detection Kit.**

**What are the symptoms of COVID-19?**  
Many patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing). The current information available to characterize the spectrum of clinical illness associated with COVID-19 suggests that symptoms include cough, shortness of breath or dyspnea, fever, chills, myalgias, headache, sore throat or new loss of taste or smell. Based on what is known about the virus that causes COVID-19, signs and symptoms may appear any time from 2 to 14 days after exposure to the virus. Based on preliminary data, the median incubation period is approximately 5 days, but may range 2-14 days.

Public health officials have identified cases of COVID-19 infection throughout the world, including the United States, which may pose risks for public health. Please check the CDC webpage for the most up to date information.

**What do I need to know about COVID-19 testing?**  
Current information on COVID-19 for healthcare providers is available at CDC's webpage, *Information for Healthcare Professionals* (see links provided in "Where can I go for updates and more information" section).

- The DiaPlexQ COVID-19 Detection Kit can be used to test nasopharyngeal swabs, oropharyngeal (throat) swabs, anterior nasal swabs, mid-turbinate nasal swabs, nasal aspirates, nasal washes, bronchoalveolar lavage (BAL) fluid and sputum.

**Report Adverse events, including problems with test performance or results, to MedWatch by submitting the online FDA Form 3500 ([https://www.accessdata.fda.gov/scripts/medwatch/index.cfm?action=reporting\\_home](https://www.accessdata.fda.gov/scripts/medwatch/index.cfm?action=reporting_home)) or by calling 1-800-FDA-1088**

**This test is to be performed only using respiratory specimens collected from individuals suspected of COVID-19 by their healthcare provider.**

- The DiaPlexQ COVID-19 Detection Kit test should be ordered for the detection of COVID-19 from individuals suspected of COVID-19 by their healthcare provider.
- The DiaPlexQ COVID-19 Detection Kit test is only authorized for use in laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, to perform high complexity tests.

Specimens should be collected with appropriate infection control precautions. Current guidance for COVID-19 infection control precautions are available at the CDC's website (see links provided in "Where can I go for updates and more information" section).

Use appropriate personal protective equipment when collecting and handling specimens from individuals suspected of having COVID-19 as outlined in the CDC Interim Laboratory Safety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 (COVID-19). For additional information, refer to CDC *Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons Under Investigation (PUIs) for Coronavirus Disease 2019 (COVID-19)* (see links provided in "Where can I go for updates and more information" section).

**What does it mean if the specimen tests positive for the virus that causes COVID-19?**

A positive test result for COVID-19 indicates that RNA from SARS-CoV-2 was detected, and the patient is infected with the virus and presumed to be contagious. Laboratory test results should always be considered in the context of clinical observations and epidemiological data in making a final diagnosis and patient management decisions. Patient management should follow current CDC guidelines.

## FACT SHEET FOR PATIENTS

DiaPlexQ COVID-19 Detection Kit - SolGent Co., Ltd. May 21, 2020

Coronavirus Disease 2019 (COVID-19)

You are being given this Fact Sheet because your sample(s) was tested for the Coronavirus Disease 2019 (COVID-19) using the DiaPlexQ COVID-19 Detection Kit.

This Fact Sheet contains information to help you understand the risks and benefits of using this test for the diagnosis of COVID-19. After reading this Fact Sheet, if you have questions or would like to discuss the information provided, please talk to your healthcare provider.

- For the most up to date information on COVID-19 please visit the CDC Coronavirus Disease 2019 (COVID-19) webpage:**
- <https://www.cdc.gov/COVID19>

**What is COVID-19?**

COVID-19 is caused by the SARS-CoV-2 virus. The virus can cause mild to severe respiratory illness and has spread globally, including the United States. The current information available to characterize the spectrum of clinical illness associated with COVID-19 suggests that symptoms include cough, shortness of breath or difficulty breathing, fever, chills, muscle pain, headache, sore throat or new loss of taste or smell.

**What is the DiaPlexQ COVID-19 Detection Kit?**

The test is designed to detect the virus that causes COVID-19 in respiratory specimens, for example nasal or oral swabs.

**Why was my sample tested?**

You were tested because your healthcare provider believes you may have been exposed to the virus that causes COVID-19 based on your signs and symptoms (e.g., fever, cough, difficulty breathing), and/or because:

- You live in or have recently traveled to a place where transmission of COVID-19 is known to occur, and/or
- You have been in close contact with an individual suspected of or confirmed to have COVID-19.

Testing of the samples will help find out if you may have COVID-19.

**What are the known and potential risks and benefits of the test?**

Potential risks include:

- Possible discomfort or other complications that can happen during sample collection.
- Possible incorrect test result (see below for more information).

Potential benefits include:

- The results, along with other information, can help your healthcare provider make informed recommendations about your care.
- The results of this test may help limit the spread of COVID-19 to your family and others in your community.

**What does it mean if I have a positive test result?**  
If you have a positive test result, it is very likely that you have COVID-19. Therefore, it is also likely that you may be placed in isolation to avoid spreading the virus to others. There is a very small chance that this test can

HCP Fact Sheet

Fact Sheet for patients

# License Approval status by country



## European, CANADA, Thailand, Philippines



**European CE-IVD**  
(Issued on 27th Feb. 2020)



**FDA Canada**  
(Issued on 5th Apr. 2020)



**FDA Thailand**  
(Issued on 27th Mar. 2020)



**FDA Philippines**  
(Issued on 19th Mar. 2020)

DE:CA70/40838-153726

### EC DECLARATION OF CONFORMITY

Solgent Co., Ltd.  
Head Office : 3F, 32, Techno 6-ro, Yuseong-gu, Daejeon, 34014, Korea  
Factory : 1F, 2F, 43-10, Techno 5-ro, Yuseong-gu, Daejeon, 34014, Korea  
Tel : +82-42-864-5095, Fax : +82-42-864-5099, global@solgent.com



Declares that the medical device(s) described hereafter  
Other Virology - NA Reagents, 15 04 00 90 00 (EDMA code)

Model Name: **DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit**  
Catalogue Number: **SOD52-K106, SOD52-K020**

Has been classified as Others not covered by Annex II and self-testing according to Directive 98/79/EC.  
Is in conformity with the applicable requirements of the following documents

Ref. No.
EN ISO 15223-1 : 2016
ISO 13485 : 2016
EN 13612 : 2002
EN ISO 17511 : 2003
EN 23640 : 2015
EN 13641 : 2002
EN ISO 14971 : 2012
EN ISO 18113-1 : 2011
EN ISO 18113-2 : 2011
IEC 62366-1:2015
IEC 62366-2:2016

Is subject to the conformity assessment procedure set out in Annex III of Directive 98/79/EC

26th, February, 2020 Signature: *Chamajerng*



Solgent Co., Ltd.

02/2020 V2.0

Health Canada  
Santé Canada

Medical Device Directorate  
Direction des instruments médicaux

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**COVID-19 Medical Device Authorization for Importation or Sale**

Authorization Reference Number : 312756  
Issue Date: 2020-04-05

Device Class/Classe de l'instrument : 3

Pursuant to section 5 of the Interim Order Respecting the Importation and Sale of Medical Devices for Use in Relation to COVID-19, made by the Minister of Health on March 18, 2020, the medical device listed below is now authorized for sale or importation in Canada.

Each shipment of a COVID-19 medical device that is imported into Canada must be accompanied by a copy of this authorization document.

This authorization is only valid for so long as the Interim Order Respecting the Importation and Sale of Medical Devices for Use in Relation to COVID-19 is in effect.

**Autorisation d'importation ou de mise en vente d'un instrument médical relatif au COVID-19**

Nom de référence de l'autorisation : 312756  
Date de délivrance: 2020-04-05

Conformément à l'article 5 de l'Arrêté d'urgence concernant l'importation et la vente d'instruments médicaux relatifs au Covid-19, réalisé par le ministre de la Santé le 18 mars 2020, les instruments médicaux ci-dessous sont présentement autorisés pour la mise en vente ou l'importation au Canada.

Tout envoi d'un instrument médical relatif au COVID-19 doit être accompagné d'une copie de la présente autorisation.

Cette autorisation est uniquement valide tant que l'Arrêté d'urgence concernant l'importation et la vente d'instruments médicaux relatifs au Covid-19 est en vigueur, ou l'autorisation est annulée.

**Device Name(s) / Nom de l'instrument**

**DIAPLEXQ NOVEL CORONAVIRUS (2019-NCOV) DETECTION KIT**

**Name & Address of Authorization Holder/Nom & adresse du titulaire de l'autorisation**

LIFE SCIENCES RESEARCH INSTITUTE (LSRI)  
1348 SUMMER STREET N-228  
HALIFAX, NOVA SCOTIA  
CANADA  
B1H 4R2

Application Number: 312756  
Numéro de la demande:

Manufacturer ID: 151657  
Identificateur du fabricant:

กรมการแพทย์  
สำนักงานคณะกรรมการอาหารและยา  
กระทรวงสาธารณสุข

หนังสือขออนุญาตนำเข้าเครื่องมือแพทย์  
สำนักงานคณะกรรมการอาหารและยา  
กระทรวงสาธารณสุข

หนังสือที่ KOR 4302287  
27 มีนาคม 2563

มีผลตั้งแต่วันที่ ๒๗ มีนาคม ๒๕๖๓  
ผู้ยื่นขออนุญาตนำเข้าเครื่องมือแพทย์ (เลขที่ 34) พ.ศ. 2549 เลขที่ขออนุญาตนำเข้าเครื่องมือแพทย์ พ.ศ. 2551  
ผู้ผลิต: บริษัท โซลเจนท์ จำกัด  
ผู้จัดจำหน่าย: SOLGENT CO., LTD. (KOR&TH)

หนังสือฉบับนี้ใช้ประโยชน์กับ:  หนังสือขออนุญาตนำเข้า  
ประเทศ Republic of Korea  
 หนังสือขออนุญาตนำเข้าเครื่องมือแพทย์  
สามารถนำเข้าเครื่องมือแพทย์ชนิดนี้ในวันที่ 3 มีนาคม 2568

มีผลตั้งแต่วันที่ ๒๗ มีนาคม ๒๕๖๓  
ประเทศไทย (KOR) 20200022773  
ประเทศ Republic of Korea  
 หนังสือขออนุญาตนำเข้าเครื่องมือแพทย์  
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### FDA Advisory No. 2020-409 || List of Approved COVID-19 Test Kits for Commercial Use

As the Philippine Government continues to exhaust all efforts to respond to the current COVID-19 pandemic, the Food and Drug Administration (FDA) - Philippines hereby provides an initial list of approved COVID-19 Test Kits for commercial use. The kits in the list below have complied with the requirements as per FDA Memorandum No. 2020-006 entitled, "Issuance of Special Certification for Imported Test Kits of COVID-19." These are PCR based kits used in laboratories, and not point-of-care kits.

PRODUCT NAME	MANUFACTURER
Nucleic acid detection kit for 2019-ncov	Shanghai GenexBio Biotech Co., LTD-Shanghai, China
Novel coronavirus 2019-ncov nucleic acid detection kit (Fluorescence PCR method)	Beijing Applied Biological Technologies Co., Ltd- Changping District 1022006 Beijing P.R
AllplexTM 2019-nCoV Assay	Seegene Inc. -Seoul, Republic of Korea
SOLGENT DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit	Solgent Co., Ltd-3F, 32, Techno 6-ro, Yuseong-gu, Daejeon, South Korea

This list shall be regularly updated. For reference please click the link: <https://www.afda.gov.ph/boast?id=10487bc1c3b927274d40c0b0a80c47b7682>  
To report any sale or distribution of COVID-19 test kits not included in the list, email us at [eresort@afda.gov.ph](mailto:eresort@afda.gov.ph).

(j) March 19, 2020 / In Unclassified / By Administrator / Comments Off

In Progress  
**USA (FDA EUA), Brazil (ANVISA), Australia (TGA), Malaysia, Indonesia etc.**

# Registration status by Country



## Malaysia, India, Mexico, Taiwan



### Malaysia



Ruj. kami: IMRP/15/1501/0048/03 (1)  
Tarikh: 16 April 2020

Medical Apparatus Supplies Sdn. Bhd.  
909, Block A, Pusat Dagangan Philo Damansara II  
No. 15, Jalan 15/11, Off Jalan Damansara  
46350 Petaling Jaya  
Selangor  
(U.P. Mohd Niza Md Azar)

Tuan,

#### LAPORAN UJIAN PENILAIAN KIT SOLGENT'S DIAPILEX™ NOVEL CORONAVIRUS (2019-nCoV) DETECTION KIT

Dengan segala hormat merujuk kepada perkara di atas.

2. Adalah dimaklumkan bahawa pihak kami telah menjalankan ujian penilaian terhadap kit novel Coronavirus (2019-nCoV) test kit seperti yang dimohon oleh pihak tuan.

3. Berdasarkan ini dikemukakan laporan bertajuk *Performance of Solgent's DiaPlex™ Novel Coronavirus (2019-nCoV) Detection Kit* untuk perhatian dan rujukan pihak tuan.

Sekian, terima kasih.

#### "BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan amanah,

(DR. HAJI TAHIR BIN ARIS)  
Pengerah  
Institut Penyelidikan Perubatan (IMR)  
03-3362 8008  
dr.tahir@ipmoh.gov.my



### India

FORM MD-15  
[See sub-rule (1) of rule 3]  
Licence to Import Medical Device

Licence No.: IMP/IV/D/2020/000421

1. M/s HEALTH ARX TECHNOLOGIES PRIVATE LIMITED, PROPERTY NO. A-9, FIEE, GROUND FLOOR, OKHLA INDUSTRIAL AREA, PHASE II, New Delhi, Delhi (India) - 110020 Telephone No. 9810087365 FAX: 9810087355 is hereby licensed to import the medical device(s) manufactured by overseas manufacturer having manufacturing site as specified below.

#### 2. Details of overseas manufacturer and manufacturing site under this licence

S No	Name and Address of Manufacturer	Name and Address of Manufacturing Site
1	Legal Manufacturing Site : M/s SolGent Co., Ltd., 43-10, Techno 5-ro, Yuseong-gu, Daejeon, 34014, Korea, Country: South Korea Telephone No.: 81-070-7893-7831 FAX: 81-042-936-5695 E-Mail : global@solgent.com	Actual Manufacturing Site : M/s SolGent Co., Ltd., 43-10, Techno 5-ro, Yuseong-gu, Daejeon, 34014, Korea, Country: South Korea Telephone No.: 81-070-7893-7831 FAX: 81-042-936-5695 E-Mail : global@solgent.com

#### 3. Details of medical device(s):

S No	Medical Device Details
1	1. Generic Name :DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit 2. Brand Name(s) if registered under the Trade Marks Act, 1999: SolGent Co., Ltd. 3. Class of Medical Device :Class C 4. Shelf Life :12 Months 5. Sterile/Non-sterile-Non-Sterilized 6. Intended Use :DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit is a real-time RT-PCR test intended for the presumptive qualitative detection of nucleic acid from the SARS-CoV-2 in respiratory specimens such as nasopharyngeal swab or oropharyngeal swab or sputum from individuals suspected of COVID-19 that meet the CDC SARS-CoV-2 clinical criteria. Results are for the presumptive detection and identification of SARS-CoV-2 RNA. The SARS-CoV-2 RNA is generally detectable in respiratory specimens during the acute phase of infection. Positive results are indicative of active infection with SARS-CoV-2 but do not rule out bacterial infection or co-infection with other viruses. Basic principal of this kit is Real-time PCR method, which is able to detect specific target gene into total RNA. This is a OneStep Multiplex RT-qPCR based detection with high-specificity & is intended for use by trained clinical laboratory professionals. 7. Material of Construction: Each kit is composed of 2X OneStep qRT-PCR Buffer (2019-nCoV) - 1.0mL X 1 ea / OneStep qRT-PCR Enzyme mix (2019-nCoV) - 200 ul x 1 ea / Primer & Probe Mixture (2019-nCoV) - 200 ul x 1 ea / Control Template (2019-nCoV) - 100 ul x 1 ea / RNase Free Water - 1.0 ml x 1 ea 8. Dimension: 9.2 cm X 5.4 cm X 6cm 9. Model No.: SQD52-K100 - DiaPlexQ™ Novel Coronavirus(2019-nCoV) Detection Kit



### Mexico



#### Listado de pruebas moleculares útiles para el diagnóstico de SARS-CoV-2 durante la contingencia de COVID-19 en México

Nombre Prueba	No catalogo	Fabricante
BERLIN TEST-PRUEBA DE RESPUESTA REALIZADA EN EL INDRE Y EN LA RED NACIONAL DE LABORATORIOS DE SALUD PÚBLICA	NO DISPONIBLE COMERCIALMENTE	IMPLEMENTACIÓN INSTITUCIONAL
DiaPlexQ™ Novel Coronavirus (2019-nCoV) Detection Kit	SQD52-K100	SolGent Co., Ltd
RIDA® GENE SARS-CoV-2 RUO	PG68159DU	B-Biopharm AG
COVID-19 Real Time PCR Kit	HBRT-COVID-19	Chaozhou Hybridio Biochemistry Ltd.
"Abbott Real Time SARS-CoV-2", Amplification Reagent Kit	09N77-080 09N77-590	Abbott Molecular Inc.
CDC 2019-Novel Coronavirus (2019-nCoV) (CDC)	10036636, 10006635, 10006626	Integrated DNA Technologies, Inc.
Accupower® SARS-CoV-2 Real Time RT-PCR Kit	AV21 SCV-2122	Promega Corporation Bloncer Corporation
SARS-CoV-2, RealTime PCR Kit	RTPCR001	Virecel, SL
Allplex™ 2019-nCoV Assay	AP10244Y	Seegene INC
GeneFinder™ COVID-19 PLUS Realamp Kit	IRM-45	CGAHC HEALTHCARE LTD
Kit para Coronavirus 2019 Logix Smart™ (COVID-19)	COVID-K-001	CO-DIAGNOSTICS, INC
LightMix® Modular SARS-CoV-2 e-gene Easy SARS-CoV (COVID19) e-gene SARS-CoV-2 (COVID-19) RdRp	40-0776-96, 33-0775-96 y 33-0776-96 respectivamente	TIB MOLBIOL, LLC



### Taiwan

正本

衛生福利部 函

受文者：立場國際有限公司

發文日期：中華民國109年5月5日

發文字號：衛授食字第1090007948號

主旨：有關貴公司因嚴重特殊傳染性肺炎防疫需求，申請輸入DiaPlexQ™新型冠狀病毒2019-nCoV核酸檢測測試劑盒供緊急公共衛生使用一案，復如說明段，請查照。

說明：  
一、依據本部食品藥物管理署陳貴公司109年3月12日食(立)字第20200302號函辦理。

二、貴公司因應緊急公共衛生情事之需要，依據藥事法第48-2條及特定藥物專案核准製造及輸入辦法第4條規定，提出專案輸入醫療器材，本部同意專案核准分批輸入產品，簽審文件編號:DHIS0000902301，輸入期間自發文日起至中央流行疫情指揮中心解散日止。產品資訊如下：

(一)品名: DiaPlexQ™ 新型冠狀病毒2019-nCoV 核酸檢測測試劑盒(型號: SQD52-K100，規格: 100人份/盒)，數量: 10盒(KIT)，製造廠名: Solgent Co., Ltd，製造廠址: 1F, 2F, 43-10, Techno 5-ro, Yuseong-gu, Daejeon, 34014, Korea，產地: 韓國(Korea)。

(二)品名: DiaPlexQ™ 新型冠狀病毒2019-nCoV 核酸檢測測試劑盒(型號: SQD52-K020，規格: 20人份/盒)，數量: 100盒(KIT)，製造廠名: Solgent Co., Ltd，製造廠址:

Quality approval  
(MDA)

Import registered  
(CDSCO)

Quality approval  
(COFERIS)

Import registered  
(FDA)



## Supply to 50 countries other than the Poland, USA(Colorado), Saudi Arabia, Belgium, Estonia



[https://www.youtube.com/watch?v=60l\\_OgR0Acg&feature=youtu.be](https://www.youtube.com/watch?v=60l_OgR0Acg&feature=youtu.be)



# Solgent picked as supplier for US agency

By Shim Hyun-tai Published 2020,04,08 18:31 Updated 2020,04,08 18:31 comments 0



Eone Diagnostics Genome Center (EDGC) said Wednesday that its affiliate test kit maker, Solgent, has been registered as the first Korean company for stockpile procurement by the U.S. Federal Emergency Management Agency (FEMA).

Solgent will initially export the new coronavirus test kits for 150,000 people and 40 other diagnostic kits, including the Middle East Respiratory Syndrome, as a procurement supplier for the U.S. government.

On top of that, Solgent submitted for the official approval for permanent use in the U.S., besides the emergency use approval from the Food and Drug Administration for its COVID-19 diagnostic kit developed until March 22.

"Our becoming the first test kit maker to supply to FEMA is a reaffirmation of the excellence and reliability of Korea's molecular diagnosis technology worldwide in the battle against the COVID-19 virus," Solgent CEO Yoo Jae-hyung said.

Ref) <http://www.koreabiomed.com/news/articleView.html?idxno=7947>

## SolGent becomes FEMA supplier

General · 15:35 April 08, 2020



### SolGent becomes FEMA supplier

This photo provided by Eone Diagnostics Genome Center Co. (EDGC) on April 8, 2020, shows Seok Do-soo (2nd from L) and Yoo Jae-hyung (2nd from R), co-heads of SolGent, a new coronavirus diagnostic solutions producer, posing for a photo after the South Korean bio firm was registered as a supplier of strategic materials to the U.S. Federal Emergency Management Agency (FEMA). With the registration, SolGent is able to export its products, including virus test kits, to

Ref) <https://en.yna.co.kr/view/PYH20200408070600325>

***The first Korean company for stockpile procurement by the U.S. Federal Emergency Management Agency (FEMA)***



**NBC NEWS CORONAVIRUS YOU ASK, WE INVESTIGATE. LIFESTYLE**

ABOUT US

**CORONAVIRUS**

## US TO RECEIVE 750,000 CORONAVIRUS TESTS FROM SOUTH KOREA

Taylor Martinez  
APRIL 13, 2020 4:40 PM

The United States is turning to South Korea — a country with an aggressive testing regime that President Donald Trump previously downplayed — to bring approximately 750,000 more coronavirus tests to the US, according to the Federal Emergency Management Agency.

FEMA, an agency within the US Department of Homeland Security, awarded contracts to manufacturers in South Korea last week to provide approximately 750,000 tests, according to a FEMA spokesperson and federal records.

Over the weekend, the first shipment of 150,000 tests were delivered to the US by SolGent. The next shipment of 600,000 tests will arrive by April 15. They are being provided by two South Korea-based companies, SD Biosensor and Ohsang Healthcare.

The intent, the FEMA spokesperson said, is to move the tests to a cold storage facility in Louisville, Kentucky, for distribution. Urgent needs will be given priority, according to a FEMA advisory obtained by CNN.

The Trump administration has waffled on its praise of South Korea's testing capabilities.

**Pulse** by Maell Business News Korea

Biz Bio&Tech Market Economy Seoul US

## S. Korea's COVID-19 testing kit maker SolGent picked as U.S. strategic supplier

2020.04.08 11:38:36 | 2020.04.08 16:04:18

[Photos provided by SolGent]

Kosdaq-listed EONE Diagnostics Genome Center Co. (EDGC) said on Wednesday that its Daegu-based affiliated COVID-19 detection kit developer SolGent has been registered with the U.S. Federal Emergency Management Agency (FEMA) as a supplier to the federal government's strategic stockpile.

EDGC Shares gained 5.39 percent to finish at 17,600 won (\$14.42) on Wednesday.

The registration grants the Korean company a license to provide its COVID-19 sampling kits as a national strategic stockpile. The initial shipments of the company's products are set at a volume for 150,000 persons.

SolGent hopes to seek a permanent supplier status from the federation government and build a local manufacturing site in the U.S. within two to three years.

SolGent's COVID-19 detection kit uses real-time polymerase chain reaction (RT-PCR) to sensitively and specifically detect the virus in patient samples by amplifying a specific region in a DNA strand.

The detection kit also was approved in Korea under the emergency use authorization.

**The Korea Herald**

Business All Industry Technology Transport Retail

## Caremile sees surge in quarantine goods orders from foreign governments

By Korea Herald | Published: Apr 15, 2020 11:20 | Updated: Apr 15, 2020 11:20

Ukrainian Ambassador Oleksandr Horin (second from right) checks a Caremille shipment with company officials. (L. Kim/Herald)

Korean safety solution company Caremille said Tuesday it is seeing a rapid surge in orders of Korean-made diagnostic kits and quarantine goods from various countries, including Ukraine, Poland, Turkey, Uzbekistan, Mexico, Iraq and Malaysia, amid the COVID-19 pandemic.

Caremille, which has rights for SolGent's global special sale, for instance, exported the "SolGent COVID-19 DiaPlexQ Detection Kit" that can be used for 100,000 people on March 27 upon an emergency request from Ukrainian President Volodymyr Zelensky. On April 11, 25,000 sets of personal protective suits were sent to Ukraine.

**한국과학기술정보연구원 Korea Biomedical Review**

Hospital Pharma Bio Device/ICT Policy People Life science

HOME Device/ICT

## Solgent picked as supplier for US agency

By Shim Hyun-jae | Published 2020.04.08 18:31 | Updated 2020.04.08 18:31 | comments 0

Sone Diagnostics Genome Center (SDGC) said Wednesday that its affiliate test kit maker Solgent, has been registered as the first Korean company for stockpile procurement by the U.S. Federal Emergency Management Agency (FEMA).

Solgent will initially export the new coronavirus test kits for 150,000 people and 40 other diagnostic kits, including the Middle East Respiratory Syndrome, as a procurement supplier for the U.S. government.

On top of that, Solgent submitted for the official approval for permanent use in the U.S., besides the emergency use approval from the Food and Drug Administration for its COVID-19 diagnostic kit developed until March 22.

"Our becoming the first test kit maker to supply to FEMA is a reaffirmation of the excellence and reliability of Korea's molecular diagnosis technology worldwide in the battle against the COVID-19 virus," Solgent CEO Yoo Jae-hyung said.

The company plans to promote supplying COVID-19 test kit procurements for FEMA, and also to provide stable supplies of its test kit, DiaPlexQ, for 50 U.S. state governments, including the Washington D.C.

Solgent's DiaPlexQ is a real-time reverse transcription-polymerase chain reaction diagnostic kit that amplifies and tests a specific gene sequence of the COVID-19 virus.

Solgent began to export diagnostic kits to test 100,000 people to Ukraine on March 27 at the request of Ukrainian President Vladimir Zelensky.

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## 100,000 PCR tests delivered to Ukraine from South Korea

30.03.2020 17:03

Some 100,000 PCR tests have been delivered to Ukraine from South Korea to detect coronavirus, the press service of the Office of the President of Ukraine has said.

"A plane carrying 100,000 PCR tests produced by SolGent to detect COVID-19 has arrived from Seoul (the Republic of Korea). Caremille has conducted the delivery for the needs of the health care system of Ukraine," the statement reads.

It notes that after passing the customs procedures on registration the test kits will be delivered to the infectious laboratories of all regions of the country, which have proper storage conditions.

According to the statement, the SolGent test kit contains all the necessary components for a polymerase chain reaction. Therefore, when used, there is no need for additional reagents. Testing lasts from 105 to 120 minutes.

The cargo was shipped to Ukraine on the initiative of the Office of the President. The delivery was coordinated by Ukraine's Ambassador to South Korea Oleksandr Horin.

**Pulse** by Maell Business News Korea

Biz Bio&Tech Market Economy Seoul US

## Korean-made COVID-19 testing kits over 100 countries

2020.04.09 15:29:39 | 2020.04.09 15:36:14

**Exports of Korean-made COVID-19 testing kits**

Seegene	90% of total production go to 49 countries
SolGent	Exports to 25 countries including Poland and Ukraine
Kogene Biotech	Exports to 25 countries including 7 Latin American countries
Gene Matrix	Exports to 4 countries including Italy, UAE and Chile
GenBody	Signed 4.8 bn won export contracts with 15 countries including Brazil & Ireland
LabGenomics	Exclusive supply to India through Germany's Siemens Healthineers
Bioneer	5 bn won export contract with Qatar's state oil company
Clinomics	Waits for MFDS export permission after 4.8 bn won contract with Hungary

**Korea's top export items in medical devices** (unit: \$ million)

General ultrasonic imaging device	588
Dental implants	247
Biomaterials for tissue repair	213
Contact lenses for everyday use	179
Individual IVF reagents	158
Immunassay reagents for highly pathogenic infectious diseases	113

\*As of 2018. Source: MFDS  
Graphics by Yoo, Kim and Song J-jun

COVID-19 testing kits are emerging as South Korea's No. 1 export items among medical devices as demand for quality and fast detection kits for coronavirus has spilled from more than 100 countries in recent months.

**CNN** politics Donald Trump Supreme Court Congress Facts First 2020 Election

## US to receive 750,000 coronavirus tests from South Korea

By Priscilla Alvarez and Katelyn Polantz, CNN  
Updated 2119 GMT (0519 HKT) April 13, 2020

**NEWS & BUZZ**

- Tapper warns Tru inspectors gene...
- Trump touts new missile but Pentagon confirm...
- Ad York St John Univers...

A member of the Brooklyn Hospital Center COVID-19 testing team calls in the next patient in line, Thursday, March 26, 2020, in the Brooklyn borough of New York.

**Washington (CNN) —** The United States is turning to South Korea -- a country with an aggressive testing regime that President Donald Trump previously downplayed -- to bring approximately

## Letter from clients as evidence for the performance

### SYNLAB (Estonia)



To: United Nations Registration Office

11.05.2020

Reference Letter

Herewith we confirm that SYNLAB Estonia has evaluated and thereafter been using DiaPlex TM Novel Corona virus (2019-nCoV) detection kit from Solgent in clinical practice for detection of SARS-CoV-2 in patient samples.

Use of Solgent's DiaPlex TM Novel Corona virus (2019 nCov) detection kit requires compliance with the manufacturer's instructions, suitable facilities and equipment as well as trained and competent personnel. By making the above statement SYNLAB does assume any liability related to Solgent's DiaPlex TM Novel Corona virus (2019 nCov) detection kit.

Sincerely

  
Rainar Aamisepp  
CEO, SYNLAB Northern Europe and CEMEA

### EONE Laboratories (Korea)

Letter of Test Evaluation Result

To whom it may concern,

As a result of evaluating Solgent's DiaPlexQ Novel Corona virus (2019-nCoV, SQD52-K100) detection kit at laboratory Medicine Division of EONE Laboratories.

This product was judged to be suitable for clinical use in terms of sensitivity, accuracy and specificity.

If you have any inquiry, please feel free contact us

Sincerely,



Laboratory Medicine Division of EONE Laboratories.

March 31<sup>st</sup> 2020

### SQLab (Korea)

Letter of Test Evaluation Result

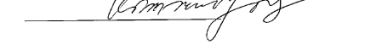
To whom it may concern,

As a result of evaluating Solgent's DiaPlexQ Novel Corona virus (2019-nCoV, SQD52-K100) detection kit at the Sure Quest Laboratory (SQLab)

This product was judged to be suitable for clinical use in terms of sensitivity, accuracy and specificity.

If you have any inquiry, please feel free contact us

Sincerely,



Nam Yong Kim, CEO

Sure Quest Laboratory (SQLab)

April 15<sup>th</sup> 2020

# THANK YOU!

[www.solgent.com](http://www.solgent.com)

SolGent co., Ltd. (Research Reagents & Molecular diagnostic Expert)  
Address: 43-10 Techno 5-ro, Yuseong-Gu, Daejeon, Republic of Korea  
Tel. +82-(0)70-7893-7831  
Fax. +82-(0)42-936-5695  
E-Mail: [global@solgent.com](mailto:global@solgent.com)