

Innovative Technology & Novel Bio-Product

고객의 Unmet Needs를 해결하는 Novel Item으로
나를 회사를 사회를 행복하게

 **ProteomeTech Inc.**

PROTIA™
Allergy-Q

PROTIA™
Food IgG

ImmuneCheck™

ANITIA
Canine IgE

TriCheck

AniCheck

A-702, 401 Yangcheon-Ro, Gangseo-Gu, Seoul 07528, Republic of Korea
Tel: +82-2-6968-5278, Fax: +82-2-6442-8345
www.proteometech.com
protia@proteometech.com



13485:2016



ProteomeTech Inc.

Innovative Technology & Novel Bio-Product

www.proteometech.com

PRODUCT LIST

Allergy test "PROTIA Allergy - Q"

Food Intolerance test "PROTIA Food IgG"

Immune Health monitoring kit "ImmuneCheck"

Novel concept of Pregnancy test "TriCheck"

Animal Allergy test "ANITIA Canine IgE"

Total IgE rapid test for Animal

Bovine colostrum IgG concentration test

Allergy Screening Test

Parallel lines array diagnostic technology



- The World's largest number of allergen test
- Small serum volume for testing (64 Line: 50µl, 96 Line: 100µl)
- Compact diagnostic panel
- Increased efficiency and affordability
- On strip calibration
- Multiple panels



Instruments for ProteomeTech's panel products



Q-STATION ELITE Fully automatic system

- 40~48 test in one process
- Testing different panels on one
- Controlling several Q-STATION ELITE with one PC



Q-Processor Automatic processor

- Integrated PC
- 10 tests in one process



Q-Smart Reading system

- Safe and Easy handling
- Multiple language available
- 10 test in one process
- Compact size & Light weight



Valuable and Informative report format

PROTIA Allergy-Q 96M				PROTIA Allergy-Q 96M					
Sample Code: 101	Name: _____			Note: _____	Group: _____				
Last name: _____	Sex: _____			Session: _____	Date: _____				
Date of birth: _____	Execution: 2019-03-13 09:03:13								
No.	Name	Code	U/ml	Class	No.	Name	Code	U/ml	Class
1	Total IgE	142	-		31	P. putrescentiae	172	<0.15	0
2	House dust	81	<0.15	0	32	Grass mix	91	1.16	2
3	D. granmycesinus	81	<0.15	0	33	Bermuda grass	92	<0.15	0
4	D. farinae	82	0.82	1	34	Timothy grass	93	1.96	2
5	Cat	81	<0.15	0	35	R. rubrum	94	<0.15	0
6	Dog dander	85	1.57	2	36	C. albicans	95	<0.15	0
7	Egg white	81	<0.15	0	37	Hazel	96	<0.15	0
8	Milk	82	<0.15	0	38	Olive	97	<0.15	0
9	Cooked beef	86	<0.15	0	39	Maple leaf syndrome	111	0.27	0
10	Peanut	81	3.80	3	40	Willow	112	<0.15	0
11	Soy bean	81	<0.15	0	41	Cottonwood	114	0.17	0
12	Wheat	84	<0.15	0	42	White ash	115	<0.15	0
13	Alster	82	<0.15	0	43	White pine	116	<0.15	0
14	Birch	83	<0.15	0	44	Japanese cedar	117	<0.15	0
15	Can	87	<0.15	0	45	Redwood	119	<0.15	0
16	Common ragweed	81	<0.15	0	46	Cherry cloudy	127	<0.15	0
17	Japanese hop	82	0.17	0	47	Candelion	88	<0.15	0
18	Mugwort	88	<0.15	0	48	Plantain	89	<0.15	0
19	A. alternata	88	<0.15	0	49	Russian thistle	91	<0.15	0
20	C. herbarum	88	<0.15	0	50	Galium	92	<0.15	0
21	A. fumigatus	88	<0.15	0	51	Common pigweed	94	<0.15	0
22	Corn	83	<0.15	0	52	Heava lark	92	<0.15	0
23	Shrimp	84	<0.15	0	53	Bee venom	91	<0.15	0
24	Muskox	83	1.94	2	54	Wasp venom	93	<0.15	0
25	Dulcified rye	81	0.75	1	55	Muscle Rat	97	<0.15	0
26	CCD	82	<0.15	0	56	Protein	98	<0.15	0
27	Peach	85	<0.15	0	57	Sheep pig	98	<0.15	0
28	Apple	89	<0.15	0	58	Wool sheep	98	<0.15	0
29	Sesame	81	<0.15	0	59	Horse	98	<0.15	0
30	A. siro	87	0.49	1	60	Horse	93	<0.15	0

PROVEN Quality



- Type of allergen panel
- Sample information
- Analyst's comments
- Allergen information
- Photo of the test panel
- IgE concentration (IU/mL, class)
- Interpretation of the class (Classification of specific IgE concentration)

Accuracy : 96.0%
 Specificity: 96.6%
 Sensitivity: 86.9%

*High agreement with the gold standard product

Food Intolerance Screening test

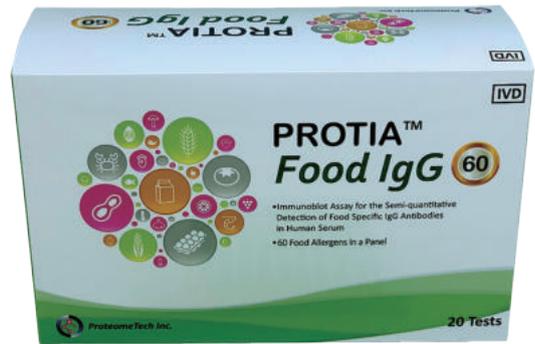
Do you often get sick for no reason?

Check out the cause with simple blood test!

PROTIA™
Food IgG 60

Immunoblot assay for the quantitative detection of food specific IgG antibodies in human serum

- 1µl of serum volume for testing
- Compact diagnostic panel
- On-strip calibration
- Line blot immunoassay
- Valuable and informative report format
- Applicable to Automatic & Semi-Automatic Instrument



CE

What is Food Intolerance?

Unlike typical IgE allergy, IgG-mediated allergy can occur a few hours or days after food intake, and symptoms vary, making it difficult to identify the cause. If you have abnormal symptoms of the gastrointestinal tract such as constipation, stomachache, etc. or various symptoms that can not figure out the cause, you should consider food allergy.

Through PROTIA Food IgG, identify the foods that do not fit, and stay healthy!

Hypersensitivity



Food Intolerance

Response after
2 ~ 72hr of food intake



Inflammatory reaction of
IgG against particular food

PROTIA™
Food IgG 60

Acute Allergy

Immediate reaction
& Anaphylaxis Shock



Histamine reaction of
IgE against allergen

PROTIA™
Allergy-Q



IgG-mediated chronic food intolerance test

Over 60 food allergens in one panel **PROTIA™ Food IgG**

Immune Health monitoring kit

ImmuneCheck™

Diagnosis of the Personal Immune System using whole blood or serum

Check your immune system!

- Measuring Concentration of Immunoglobulin using whole blood or serum
- Get the results in 20 minutes
- Minimum sample volume using lancet
- Useful for children with difficult blood collection
- Visually determine using concentration reference chart without any extra instrument



ImmuneCheck IgG



- Quantitative measurement of Total IgG
- Only require 5 ul of whole blood or serum
- Predictive diagnosis of Immune level
- Assay range : 1.2 ~ 4,000 mg/dL

ImmuneCheck IgE



- Quantitative measurement of Total IgE
- Only require 10 ul of whole blood or serum
- Predictive diagnosis of allergic diseases
- Assay range : 20 ~ 2,000 IU/mL

Test method of ImmuneCheck IgG

5ul

10~15 Sec

4 Drops (100ul)

20 Minutes

Q-Reader

Concentration Reference Chart – ImmuneCheck™ IgG

HIJ CRC YYYNNN YYYNNMDD Website: <http://www.proteomtech.com>

Lot. No. HIFYYNNH

Strip No.	1	2	3	4	5	6	7	8	9	10	
Human IgG Concentration mg/dL	0	7.8	31	125	250	500	750	1000	1500	2000	
Relative Signal Intensity to Control line (C Line=1)	Test line 2	2.4	2.0	1.5	0.9	0.6	0.4	0.3	0.3	0.2	0.1
Test line 3	-	1.0	1.4	1.3	1.2	0.9	0.7	0.6	0.5	0.4	

Reference guidelines for whole blood method →

Extremely Decrease Decrease Average Increase

Ⓜ The Reference Chart refers to IgG concentration regardless of the sample

Ⓜ A method to convert the concentration of IgG in the blood to serum

Concentration of IgG in the serum (mg/dL) = $\left[\frac{\text{IgG Conc. in Blood (mg/dL)}}{1.00 - 0.517} \right] \times 100$

Ⓜ Image of 150 mg/dL

WORLD CLASS PRODUCT OF KOREA

CE

세계일류상품

Novel concept of Pregnancy test

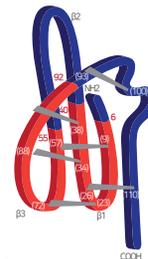
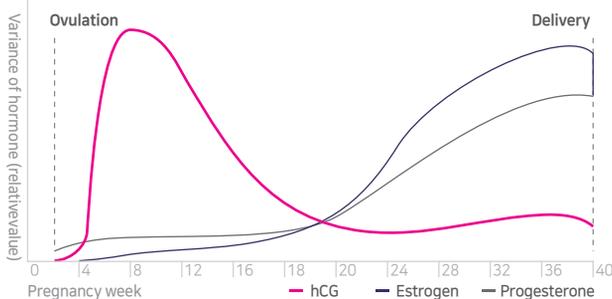
TriCheck

Solution for False Negative with additional line (T2) specially loaded in TriCheck



What is hCG bcf?

There is a multitude of hCG forms found in serum and urine due to the degradation by the enzyme. One of them, hCG β cf, is well known for disturbing the detection of intact hCG hormone, which will bring out false negative, and their hormone concentration is known to five times higher!

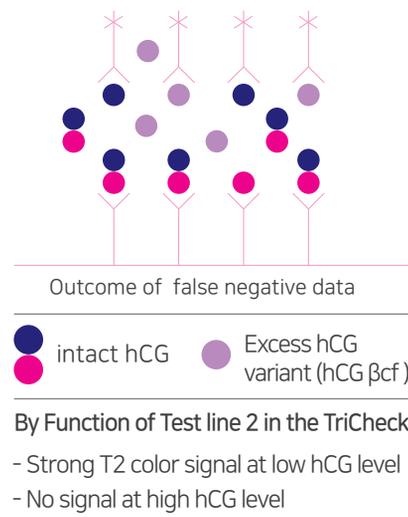


TriCheck

Reading the result

Pregnancy Status	Existing Diagnostic Kit	TriCheck
Non-conception	Negative	Negative
Conception (High conc. Of hCG & hCG β cf)	Positive	Positive
	False Negative	Positive
	T C	T1 C T2

Limit of Sandwich method immuno-assay



TriCheck Midstream

For general public & pharmacy



TriCheck-C Cassette

For clinic & hospital



TriCheck combo

For clinic & hospital

Providing quantitative result using urine and serum



Products for Animal

Allergy test for Animal, ANITIA Canine IgE



Animal allergy screening test for dog

Detecting 66 allergens With 50 ul of serum

- Requires small volume of serum (50ul)
- 66 specific IgE test
- Line blot immunoassay : An accurate and reproducible test
- On strip calibration



AniCheck

Rapid test for Animal, AniCheck

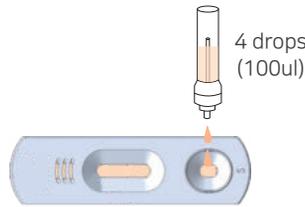
Total IgE Rapid test for dog and cat



AniCheck™
Canine Total IgE



AniCheck™
Feline Total IgE



- ✓ Small volume of sample
- ✓ Simple method
- ✓ Accurate result

Immediate allergy sensitivity test
Verification of parasite infection history after adoption
Check tlgE levels after allergy treatment

- Total IgE quantitative test in 15 minutes
- Assay range: 5 - 150 µg/mL (Canine) / 5 - 350 µg/mL (Feline)

Measurement of IgG concentration in bovine colostrum



AniCheck™
Bovine IgG - Colostrum

Best colostrum selection!



Calves are Immune-deficient when they are born.
Feed your calves with appropriate colostrum
containing high concentration of IgG to save them!

- Requires small volume of colostrum (5ul)
- Total IgG quantitative test in 10 minutes simple method.
- Quantitative data with Q-Reader
semi-quantitative data with color referenc chart
- Assay range : 2 ~ 140mg/mL

KOViCheck COVID-19 IgG/IgM

Protect yourself from serious infection with highly specific KOViCheck



COVID-19 (Corona Virus disease 2019) is the respiratory infectious disease caused by SARS-CoV-2 that has not been previously identified in humans. WHO declared this beta-coronavirus as a pandemic disease being regarded as spreading all around the world.

**Immunochromatographic assay
for detection of SARS-CoV-2 specific
human Immunoglobulin G and Immunoglobulin M.**

Test time	Within 15 minutes
Specimen	Whole blood/ Serum/ Plasma
Storage temperature	2-30°C/ 36-86°F
Packaging size	40 Tests/Kit
Shelf life	12 months

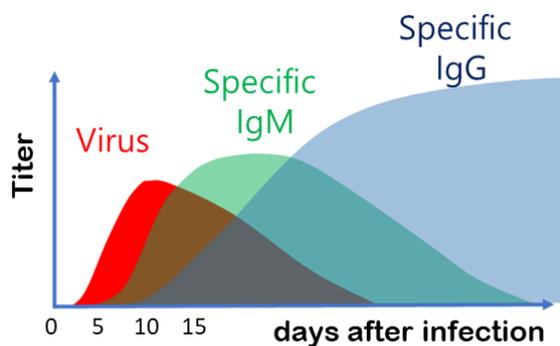
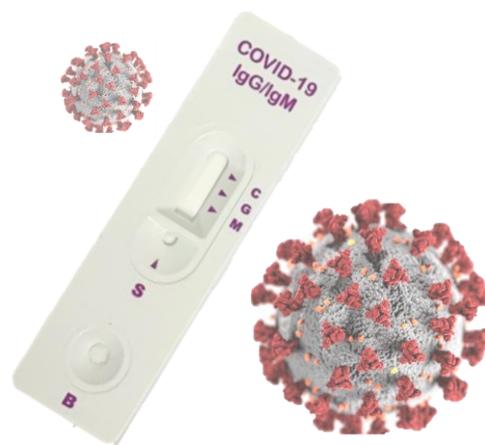
 **ProteomeTech Inc.**

Ordering Information

Cat. No.	Product name	Packaging size
PKOV0314	KOViCheck COVID-19 IgG/IgM	40 Tests/Kit

Key Features

- Rapid Test for SARS-CoV-2 antibodies within 15 minutes.
- Available for venous whole blood, serum or plasma.
- Excellent clinical efficacy.



Detection of COVID-19 specific IgM antibody indicates a recent exposure to COVID-19, whereas detection of COVID-19 specific IgG antibody indicates a later stage of infection. So, this combined antibody test could provide information on the stage of COVID-19 infection.

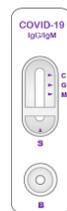
KOVIcheck COVID-19 IgG/IgM

Immuno-chromatographic assay for detection of SARS-CoV-2 specific human Immunoglobulin G and Immunoglobulin M

CE IVD REF PKOV0314

 **ProteomeTech Inc.**

KIT CONTENTS



Test Cassette



Buffer bottle



Dropper

TEST PROCEDURE

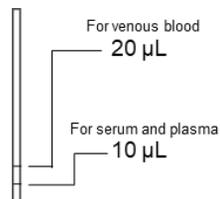
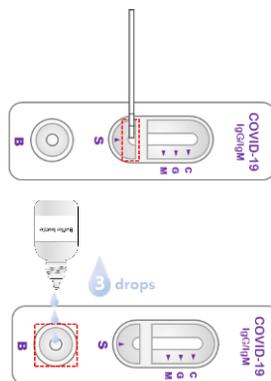
Serum and plasma sample:

Drop 10 μL sample into sample window (S) using a dropper.

Venous blood sample:

Drop 20 μL sample into sample window (S) using a dropper.

Inject 3 drops of buffer into buffer window (B) using a buffer bottle.



Read test result in 10-15 minutes.

Performance agreement results of clinical data

① Performance agreement of IgM

- Positive agreement (PA): 96.7%, 95% CI (92.1~100.0%)
- Negative agreement (NA): 100.0%, 95% CI (100.0~100.0%)
- Overall agreement: 98.2%
- Positive predictive value (PPV): 100.0%
- Negative predictive value (NPV): 96.2%

② Performance agreement of IgG

- Positive agreement (PA): 93.3%, 95% CI (87.0~100.0%)
- Negative agreement (NA): 98.0%, 95% CI (94.1~100.0%)
- Overall agreement: 95.5%
- Positive predictive value (PPV): 98.2%
- Negative predictive value (NPV): 92.5%

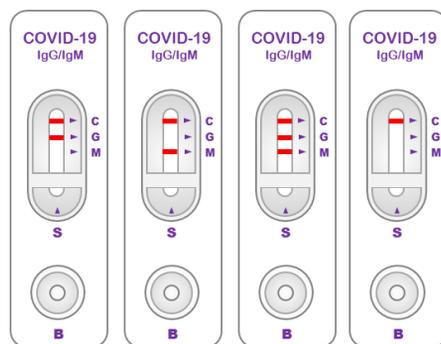
③ Performance agreement of IgM and IgG

- Positive agreement (PA): 96.7%, 95% CI (92.1~100.0%)
- Negative agreement (NA): 98.0%, 95% CI (94.1~100.0%)
- Overall agreement: 97.3%
- Positive predictive value (PPV): 98.3%
- Negative predictive value (NPV): 96.1%

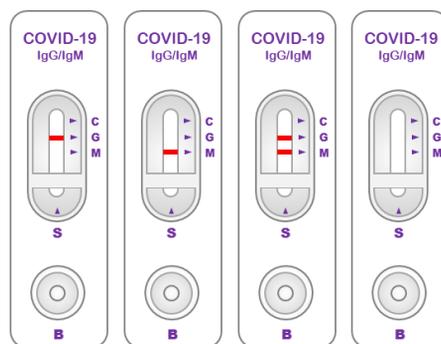
INTERPRETATION OF TEST RESULT

Positive

Negative



Invalid



 ProteomeTech Inc.

A-702, 401 Yangcheon-Ro, Gangseo-Gu, Seoul 07528, Republic of Korea
Tel: +82-2-6968-5278
Website: www.proteometech.com
E-mail: protia@proteometech.com

EC REP MT Promedt Consulting GmbH

Altenhofstrasse 80, 66386 St. Ingbert, Germany
Tel: +49-6894-581020, Fax: +49-6894-581021
E-mail: info@mt-procons.com

IVD CE

2020/08/28

 **ProteomeTech Inc.**

Protect yourself from silent infection by highly specific GENE^dania COVID-19 qRT-PCR



GENEdania COVID-19 qRT-PCR

The **GENEdania COVID-19 qRT-PCR** is an *in vitro* diagnostic (IVD) one step real-time RT-PCR kit for the detection of nucleic acid from SARS-CoV-2. It targets the Orf1ab gene and the N gene for SARS-CoV-2 (COVID-19), specifically. The E gene for beta coronavirus and endogenous control gene for kit verification are also included in a single tube. All four genes are amplified simultaneously in one tube and give the accurate results less than 2 hours from purified COVID-19 RNA samples. This kit can be applied to the sample from upper respiratory specimens e.g. nasopharyngeal, oropharyngeal swab and lower respiratory specimens, e.g. sputum, from individuals with signs and symptoms of COVID-19.

Key Features

- Detects three COVID-19 genes
: **Orf1ab**, **N** and **E** genes and endogenous control gene
- Full compliance with the WHO Guidelines
- Less than 2 hours from RNA to results on most qPCR machines
- One tube and one step real-time RT-PCR assay Kit
- UDG (Uracil-DNA Glycosylase) to eliminate the carry-over contamination during the RT-PCR assay

Ordering Information

Cat. No.	Product name	Packaging size
PGRP0011	GENEdania COVID-19 qRT-PCR	100 Tests/Kit

Kit Components

Name	Volume	Quantity
GENEdania 2x qRT-PCR Premix	1,000 μ L	1 E.A.
GENEdania Primer/Probe mixture	500 μ L	1 E.A.
GENEdania Positive control	50 μ L	1 E.A.
GENEdania Negative control	100 μ L	1 E.A.

Running Program

STEPS	Temp.	Time	Cycle
Reverse transcription	50°C	20 min	1
Pre-denaturation	95°C	5 min	1
Denaturation	95°C	15 sec	45
Annealing/ Extension/ Detection	58°C	60 sec	

[Set on Threshold and Baseline]

Target	Threshold	Baseline	
		Begin	End
Orf1ab gene	300	3	15
N gene	300	3	15
E gene	300	3	15
I.C.*	300	3	15

* I.C.: Internal Control

[Result Interpretation]

#	Orf1ab	N	E	I.C.	Assay Result
1	≤ 40	≤ 40	≤ 40	≤ 35	COVID-19 Positive
2	≤ 40	≤ 40	U.D.*	≤ 35	
3	≤ 40	U.D.*	≤ 40	≤ 35	
4	U.D.*	≤ 40	≤ 40	≤ 35	
5	≤ 40	U.D.*	U.D.*	≤ 35	Repeat the test (COVID-19 Positive if Orf1ab ≤ 40)
6	U.D.*	≤ 40	U.D.*	≤ 35	Repeat the test (COVID-19 Positive if N ≤ 40)
7	U.D.*	U.D.*	≤ 40	≤ 35	Beta coronavirus
8	U.D.*	U.D.*	U.D.*	≤ 35	Negative
9	U.D.*	U.D.*	U.D.*	U.D.*	Invalid (re-test)

* U.D.: Undetermined

[Ct. value for Positive and Negative controls]

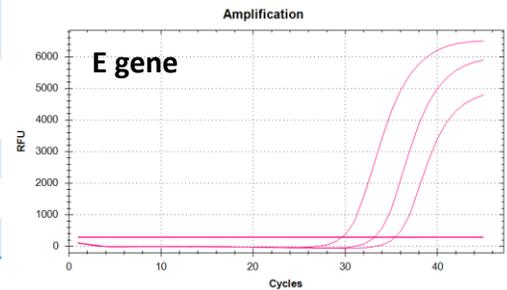
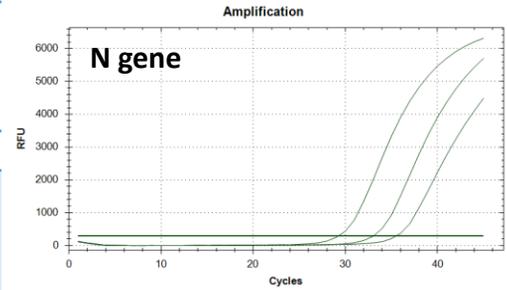
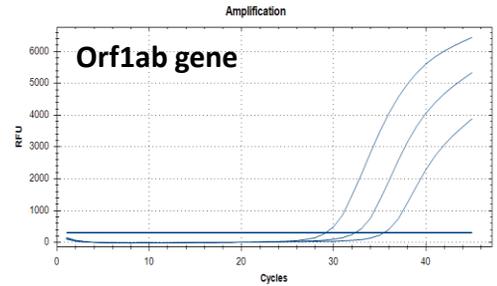
Control	FAM (Orf1ab)	HEX (N gene)	CAL Fluor Red 610 (E gene)	Cy5 (I.C.*)
Positive Control	≤ 35	≤ 35	≤ 35	≤ 35
Negative Control	No Ct.	No Ct.	No Ct.	No Ct.

* I.C.: Internal Control

[Analytes]

Target	Fluorescence	Detection wavelength (nm)	
		Excitation	Emission
Orf1ab gene	FAM	494	518
N gene	HEX	538	554
E gene	CAL Fluor Red 610	590	610
I.C.*	Cy5	649	666

* I.C.: Internal Control



ProteomeTech Inc.
 A-702, 401 Yangcheon-Ro, Gangseo-Gu,
 Seoul 07528, Republic of Korea
 Tel: +82-2-6968-5278, Fax: +82-2-6442-8345
 Website: www.proteometech.com
 E-mail: protia@proteometech.com

EC REP MT Promedt Consulting GmbH
 Altenhofstrasse 80, 66386 St. Ingbert,
 Germany
 Tel: +49-6894-581020, Fax: +49-6894-581021
 E-mail: info@mt-procons.com