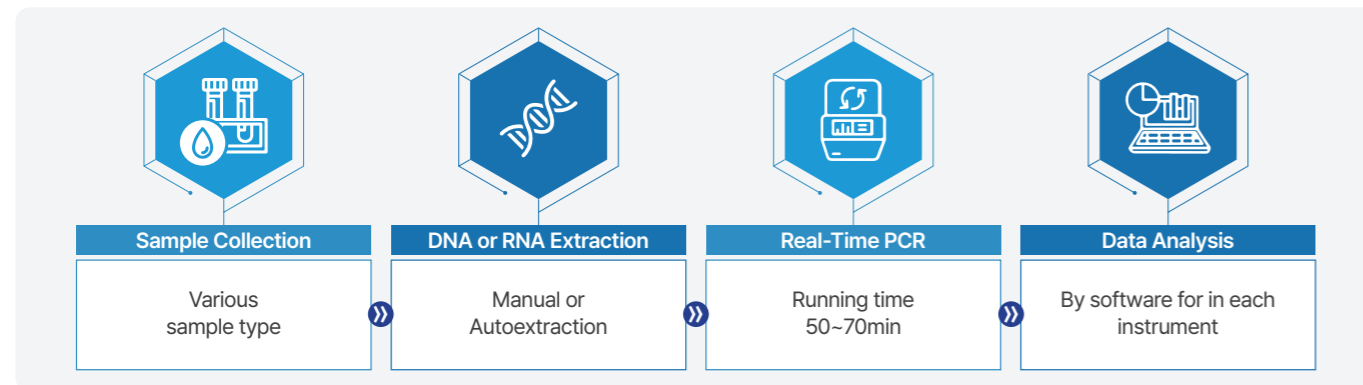


# Animal Molecular Diagnostic Products

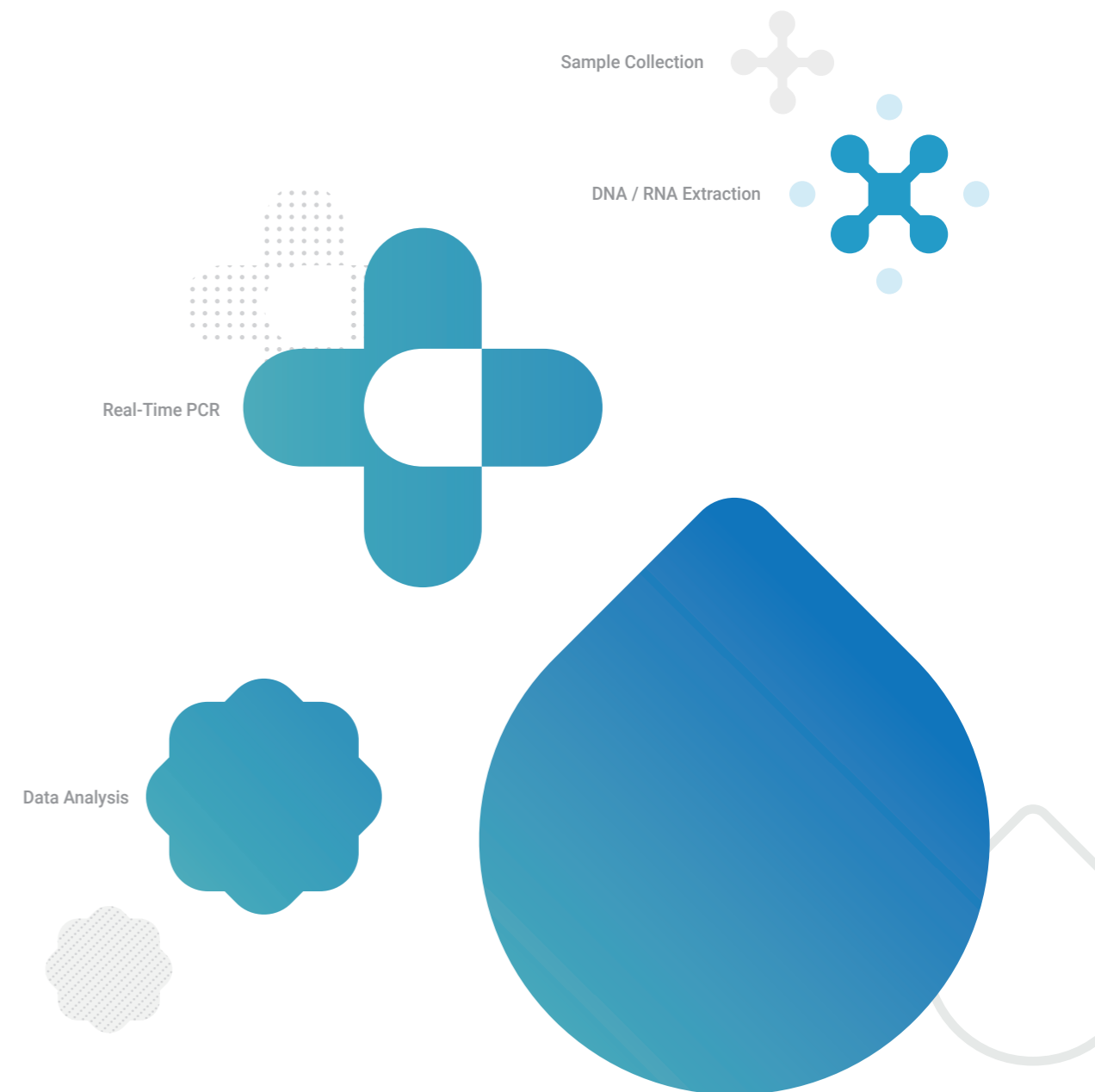
# OPTIPHARM

## Process & Reaction Time



# OPTIPHARM

63, Osongsaengmyeong 6-ro, Osong-eup, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Republic of Korea  
E-mail : pcrts@optipharm.co.kr TEL : +82-43-249-7550 FAX : +82-43-249-7501 www.optipharm.co.kr



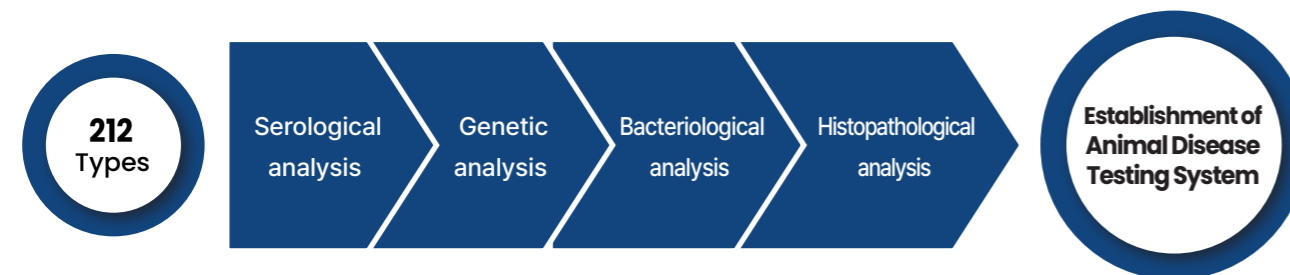
# OPTIPHARM

## OPTIPHARM

More Professional & Accurate Diagnosis by approaching various perspectives



### Animal Diagnosis



- **OPTIPHARM** was established in July 2000 and Currently, OPTIPHARM is engaged in businesses such as animal disease diagnosis, animal medicine, bacteriophage, Medipig, xenotransplantation, and VLP vaccines.
- **OPTIPHARM** was started the animal diagnosis business from 2006. Especially, OPTIPHARM is an expert livestock assessment institute designated by APQA ((Korean) Animal and Plant Quarantine Agency), has a market share of more than 70% in South Korea.
- **OPTIPHARM** continues to develop high quality animal diagnostic kits based on various and abundant diagnostic experiences and know-how, striving for fast and accurate emotions, and is still striving to develop customer-friendly products.

## Advantages

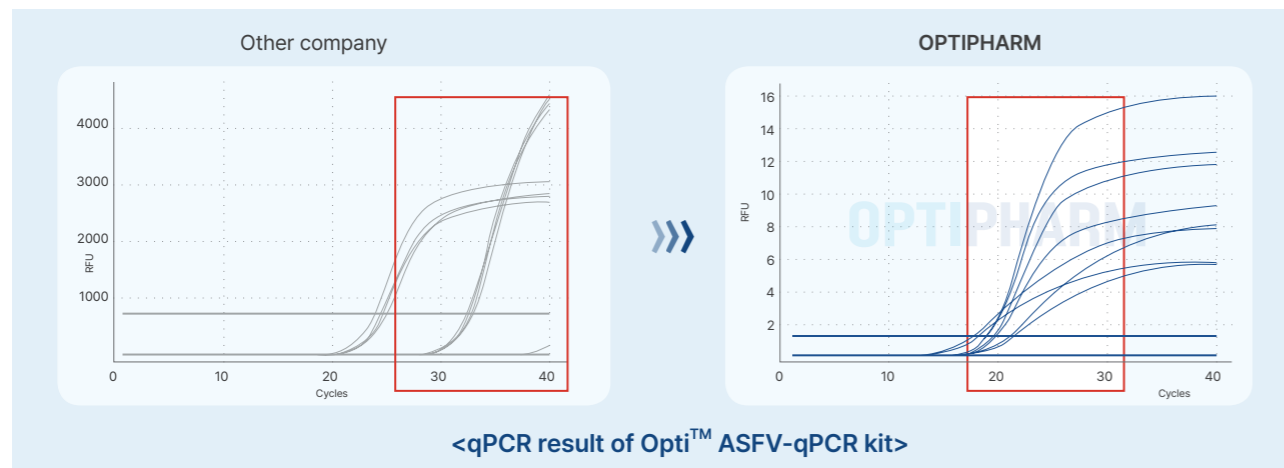
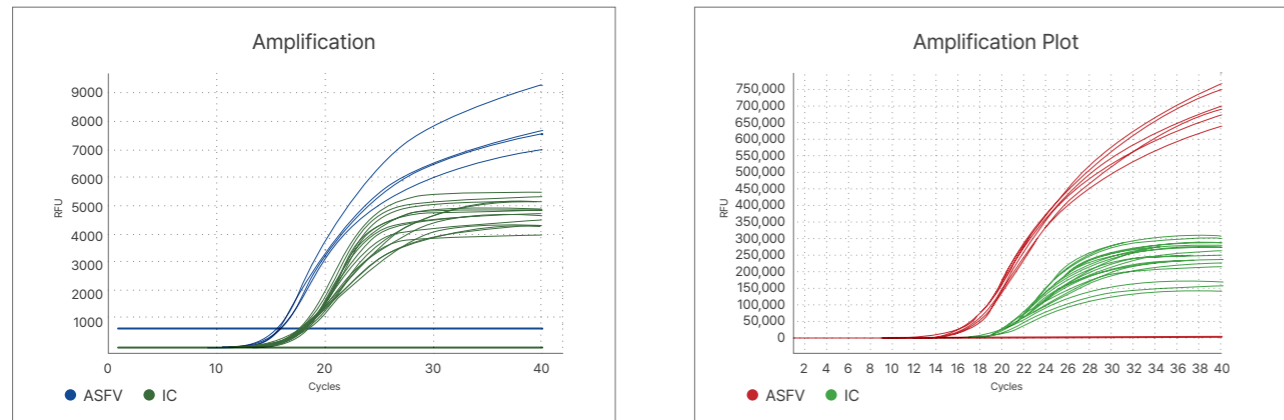
The advantages of Optipharm's diagnostic kit ensure customer satisfaction.



# Opti™ ASFV-qPCR kit (IA-01)

## ■ Specification

- Approved by Korean Animal and Plant Quarantine Agency (APQA); No. 238-002
- Opti™ ASFV-qPCR kit is an *in vitro* diagnostic reagent used to diagnose pigs suspected of African swine fever virus (ASFV) infection
- Sample : Swine Blood, Serum, Tissue etc.
- Running time : 50 – 70 Minutes



Opti™ ASFV-qPCR kit showed the **higher sensitivity than other company kit in the same samples.** So you can do **the more accurate analysis** because you can get results reducing false positives and false negatives.

## ■ Swine (Bacteria)

#Certificate of Free Sales product

No.	Cat. No.	Product	Description
1	SWBS-001	Opti™ APP-qPCR kit	<i>Actinobacillus pleuropneumoniae</i>
2	SWBS-002	Opti™ AS-qPCR kit	<i>Actinobacillus suis</i>
3	SWBS-003	Opti™ BB-qPCR kit	<i>Bordetella bronchiseptica</i>
4	SWBS-004	Opti™ BH-qPCR kit	<i>Brachyspira hyodysenteriae</i>
5	SWBS-005	Opti™ BP-qPCR kit	<i>Brachyspira pilosicoli</i>
6	SWBS-006	Opti™ CP-qPCR kit	<i>Clostridium perfringens</i>
7	SWBS-007	Opti™ ER-qPCR kit	<i>Erysipelothrix rhusiopathiae</i>
8	SWBS-008	Opti™ HP-qPCR kit	<i>Haemophilus parasuis</i>
9	SWBS-009	Opti™ Law-qPCR kit	<i>Lawsonia intracellularis</i>
10	SWBS-010	Opti™ MH-qPCR kit	<i>Mycoplasma hyopneumoniae</i>
11	SWBS-011	Opti™ MHR-qPCR kit	<i>Mycoplasma hyorhinis</i>
12	SWBS-012	Opti™ MHS-qPCR kit	<i>Mycoplasma hyosynoviae</i>
13	SWBS-013	Opti™ MS-qPCR kit	<i>Mycoplasma suis</i>
14	SWBS-014	Opti™ PM-qPCR kit	<i>Pasteurella multocida</i>
15	SWBS-015	Opti™ Sal-qPCR kit	<i>Salmonella</i> spp.
16	SWBS-016	Opti™ SS-qPCR kit	<i>Streptococcus suis</i>
17	SWBS-017	Opti™ LM-qPCR kit	<i>Listeria monocytogenes</i>
18	SWBS-018	Opti™ Lep-qPCR kit	<i>Leptospira</i> spp.
19	SWBS-019	Opti™ Asu-qPCR kit	<i>Actinomyces suis</i>
20	SWBM-020	#Opti™ PM/HP/APP/MH Multi-qPCR kit	<i>P. multocida, H. parasuis, A. pleuropneumoniae, M. hyopneumoniae</i>
21	SWBM-021	#Opti™ SLBB Multi-qPCR kit	<i>Salmonella</i> spp., <i>L. intracellularis, B. hyodysenteriae, B. pilosicoli</i>
22	SWBS-022	Opti™ Bant-qPCR kit	<i>Bacillus anthracis</i>
23	SWBS-023	Opti™ BruS-qPCR kit	<i>Brucella suis</i>
24	SWBS-024	Opti™ CH-qPCR kit	<i>Chlamydia</i> spp.
25	SWBS-025	Opti™ Cdi-qPCR kit	<i>Clostridium difficile</i>
26	SWBS-026	Opti™ Cbu-qPCR kit	<i>Coxiella burnetii</i>
27	SWBS-027	Opti™ Gau-qPCR kit	<i>Glaesserella australis</i>
28	SWBS-028	Opti™ Lpn-qPCR kit	<i>Legionella pneumophila</i>
29	SWBS-029	Opti™ Mha-qPCR kit	<i>Mannheimia (Pasteurella) haemolytica</i>
30	SWBS-030	Opti™ Myc-qPCR kit	<i>Mycobacterium</i> spp.
31	SWBS-031	Opti™ Noc-qPCR kit	<i>Nocardia</i> spp.
32	SWBS-032	Opti™ Shy-qPCR kit	<i>Streptococcus hyicus</i>
33	SWBS-033	Opti™ Strep-qPCR kit	<i>Streptococcus</i> spp.
34	SWBS-034	Opti™ Upa-qPCR kit	<i>Ureaplasma parvum</i>
35	SWBM-035	Opti™ MRSA Multi-qPCR kit	<i>Staphylococcus aureus, mecA</i>
36	SWBM-036	Opti™ VRE Multi-qPCR kit	<i>Enterococcus</i> spp., <i>Vancomycin A/B</i>

## - Swine (Virus)

\*Korean animal and Plant Quarantine Agency(APQA) approved product  
#Certificate of Free Sales product

No.	Cat. No.	Product	Description
1	IA-01	*Opti™ ASFV-qPCR kit	African swine fever virus
2	IP-01	*Opti™ PCMV-qPCR kit	Porcine cytomegalovirus
3	SWVS-003	Opti™ PCV2-qPCR kit	Porcine circovirus type 2
4	SWVS-004	Opti™ PCV3-qPCR kit	Porcine circovirus type 3
5	SWVS-005	Opti™ PPV-qPCR kit	Porcine parvovirus
6	SWVS-006	Opti™ ADV-qPCR kit	Pseudorabiesvirus; Aujeszzk's disease virus
7	SWVS-007	Opti™ PRRSV (NA/EU)-qPCR kit	Porcine reproductive and respiratory syndrome(NA/EU) virus
8	SWVS-008	Opti™ PEDV-qPCR kit	Porcine epidemic diarrhea virus
9	SWVM-009	Opti™ RV-A/B/C Multi-qPCR kit	Rotavirus A/B/C
10	SWVS-010	Opti™ TGEV-qPCR kit	Transmissible gastroenteritis virus
11	SWVS-011	Opti™ SIV-qPCR kit	Porcine Influenza A virus
12	SWVS-012	Opti™ JEV-qPCR kit	Japanese encephalitis virus
13	SWVM-013	*Opti™ PRRSV/PCV2 Multi-qPCR kit	Porcine reproductive and respiratory syndrome (NA/EU) virus, Porcine circovirus type 2
14	SWVM-014	Opti™ PEDV/TGEV/RVA Multi-qPCR kit	Porcine epidemic diarrhea virus, Transmissible gastroenteritis virus, Rotavirus A
15	SWVM-015	*Opti™ PEDV/TGEV/RVA/RVC Multi-qPCR kit	Porcine epidemic diarrhea virus, Transmissible gastroenteritis virus, Rotavirus A/C
16	SWVS-016	Opti™ EMCV-qPCR kit	Encephalomyocarditis virus
17	SWVS-017	Opti™ CSFV-qPCR kit	Classical swine fever virus
18	SWVS-018	Opti™ PDCoV-qPCR kit	Porcine delta corona virus
19	SWVS-019	Opti™ PPIV5-qPCR kit	Porcine parainfluenza virus 5
20	SWVM-020	#Opti™ PCV2 genotyping Multi-qPCR kit	Porcine circovirus type 2 genotyping
21	SWVM-021	#Opti™ SIV/JEV/EMCV Multi-qPCR kit	Porcine Influenza A virus, Japanese encephalitis virus, Encephalomyocarditis virus
22	SWVM-022	#Opti™ PPV/PCMV/ADV Multi-qPCR kit	Porcine parvovirus, Porcine cytomegalovirus, Pseudorabiesvirus; Aujeszzk's disease virus
23	SWVM-023	#Opti™ HP-PRRSV/PCV2 Multi-qPCR kit	Highly Pathogenic-Porcine reproductive and respiratory syndrome (NA/EU) virus, Porcine circovirus type 2
24	SWVM-024	Opti™ SIV/PCMV/CSFV Multi-qPCR kit	Porcine Influenza A virus, Porcine cytomegalovirus, Classical swine fever virus
25	SWVM-025	Opti™ PRRSV/PCV2/PCV3 Multi-qPCR kit	Porcine reproductive and respiratory syndrome (NA/EU) virus, Porcine circovirus type 2/3
26	SWVM-026	Opti™ PCMV/CSFV/EMCV Multi-qPCR kit	Porcine cytomegalovirus, Classical swine fever virus, Encephalomyocarditis virus
27	SWVM-027	Opti™ RVA/PEDV/Sal/Law Multi-qPCR kit	Rotavirus A, Porcine epidemic diarrhea virus, <i>Salmonella</i> spp., <i>L. intracellularis</i>
28	SWVS-028	Opti™ AKAV-qPCR kit	Akabane virus
29	SWVS-029	Opti™ TTV-qPCR kit	Alphatorquevirus (Torque teno, TTV)
30	SWVS-030	Opti™ APOIV-qPCR kit	Apoi virus
31	SWVS-031	Opti™ BATV-qPCR kit	Batai virus
32	SWVS-032	Opti™ BDVI-qPCR kit	Border disease virus
33	SWVS-033	Opti™ BDVII-qPCR kit	Borna disease virus
34	SWVS-034	Opti™ CVV-qPCR kit	Cache valley virus
35	SWVS-035	Opti™ CHIKV-qPCR kit	Chikungunya virus
36	SWVS-036	Opti™ EEEV-qPCR kit	Eastern equine encephalitis virus
37	SWVS-037	Opti™ EV-G-qPCR kit	Porcine enterovirus G
38	SWVS-038	Opti™ GETV-qPCR kit	Getah virus
39	SWVM-039	Opti™ HV Multi-qPCR kit	Hantavirus Pulmonary Syndrome (HPS), Hantavirus hemorrhagic fever with renal syndrome (HFRS-Seoul, Hantaan)
40	SWVS-040	Opti™ HAV-qPCR kit	Hepatitis A

## - Swine (Virus)

No.	Cat. No.	Product	Description
41	SWVS-041	Opti™ HBV-qPCR kit	Hepatitis B
42	SWVS-042	Opti™ HEV-qPCR kit	Hepatitis E
43	SWVM-043	Opti™ HAV/HBV/HEV Multi-qPCR kit	Hepatitis A/B/E
44	SWVS-044	Opti™ RV-qPCR kit	Rhinovirus
45	SWVS-045	Opti™ IBV-qPCR kit	Ibaraki virus
46	SWVS-046	Opti™ LV-qPCR kit	Ljungan-like virus
47	SWVS-047	Opti™ LIV-qPCR kit	Louping ILL virus
48	SWVS-048	Opti™ MV-qPCR kit	Measles virus
49	SWVS-049	Opti™ MenPV-qPCR kit	Menangle (Menangle pararubulavirus, MenPV) virus
50	SWVS-050	Opti™ NiV-qPCR kit	Nipah virus
51	SWVS-051	Opti™ PAdV-qPCR kit	Porcine adenovirus
52	SWVM-052	Opti™ PAsV Multi-qPCR kit	Porcine astrovirus genotyping (type 1-5)
53	SWVS-053	Opti™ PBoV-qPCR kit	Porcine bocavirus
54	SWVM-054	Opti™ SPV Multi-qPCR kit	Swine papillomavirus 1/2
55	SWVS-055	Opti™ PHEV-qPCR kit	Porcine Hemagglutinating encephalomyelitis virus
56	SWVS-056	Opti™ PKoV-qPCR kit	Porcine kobuvirus
57	SWVM-057	Opti™ PLHV Multi-qPCR kit	Porcine lymphotropic herpesvirus type 1/2
58	SWVS-058	Opti™ PBV-qPCR kit	Porcine picobirnavirus
59	SWVS-059	Opti™ PyV-qPCR kit	Porcine polyomavirus
60	SWVS-060	Opti™ PRCV-qPCR kit	Porcine respiratory coronavirus
61	SWVS-061	Opti™ PoRV-qPCR kit	Porcine rubulavirus
62	SWVS-062	Opti™ PSV-qPCR kit	Porcine sapelovirus
63	SWVS-063	Opti™ PSaV-qPCR kit	Porcine sapovirus
64	SWVS-064	Opti™ PTV-qPCR kit	Porcine Teschovirus A virus
65	SWVS-065	Opti™ PToV-qPCR kit	Porcine torovirus
66	SWVS-066	Opti™ RABV-qPCR kit	Rabies virus
67	SWVS-067	Opti™ ReoV-qPCR kit	Reovirus
68	SWVS-068	Opti™ RSV-qPCR kit	Respiratory syncytial virus A/B
69	SWVS-069	Opti™ SVDV-qPCR kit	Swine vesicular disease virus
70	SWVS-070	Opti™ SWPV-qPCR kit	Swinepox virus
71	SWVS-071	Opti™ TBEV-qPCR kit	Tick-born encephalitis virus
72	SWVS-072	Opti™ TioV-qPCR kit	Tioman virus
73	SWVS-073	Opti™ VEEV-qPCR kit	Venezuelan equine encephalitis virus
74	SWVM-074	Opti™ VSV Multi-qPCR kit	Swine vesicular stomatitis indiana virus (VSIV), new jersey virus (VSNJV)
75	SWVS-075	Opti™ WSL-qPCR kit	Wesselsbron virus
76	SWVS-076	Opti™ WNV-qPCR kit	West Nile virus
77	SWVS-077	Opti™ WEEV-qPCR kit	Western equine encephalitis virus

## Swine (Fungi)

No.	Cat. No.	Product	Description
1	SWFS-001	Opti™ Asp-qPCR kit	<i>Aspergillus</i> spp.
2	SWFS-002	Opti™ BM-qPCR kit	<i>Blastomyces</i> spp.
3	SWFS-003	Opti™ Candida-qPCR kit	<i>Candida</i> spp.
4	SWFS-004	Opti™ CC-qPCR kit	<i>Cryptococcus</i> spp.
5	SWFS-005	Opti™ HP-qPCR kit	<i>Histoplasma</i> spp.
6	SWFS-006	Opti™ MS-qPCR kit	<i>Microsporium</i> spp.
7	SWFS-007	Opti™ Ci-qPCR kit	<i>Coccidioides immitis</i>
8	SWFS-008	Opti™ Pbr-qPCR kit	<i>Paracoccidioides brasiliensis</i>
9	SWFS-009	Opti™ Tma-qPCR kit	<i>Talaromyces marneffeii</i>
10	SWFS-010	Opti™ TP-qPCR kit	<i>Trichophyton</i> spp.

## Swine (Parasite)

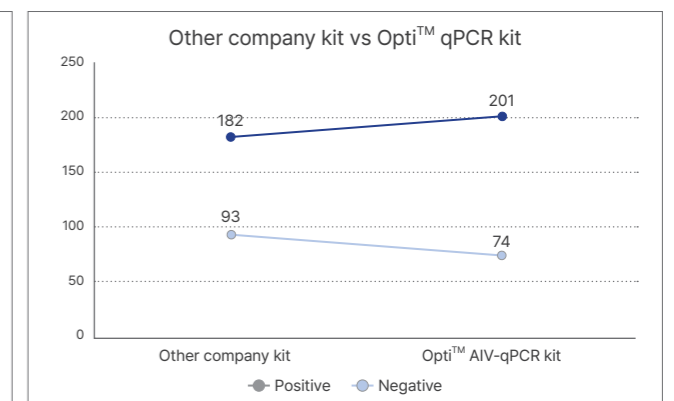
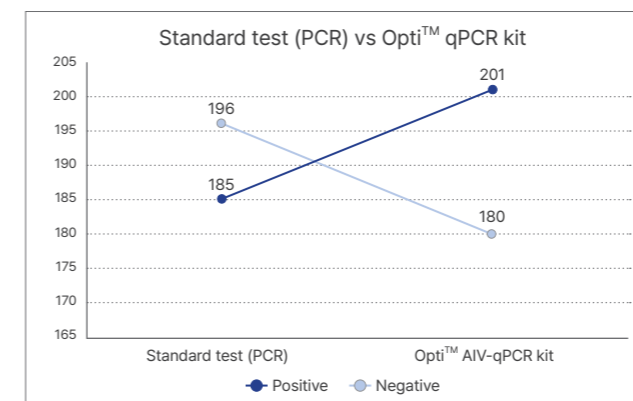
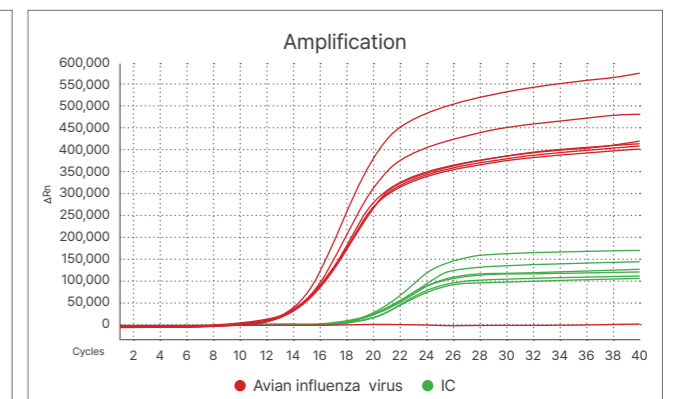
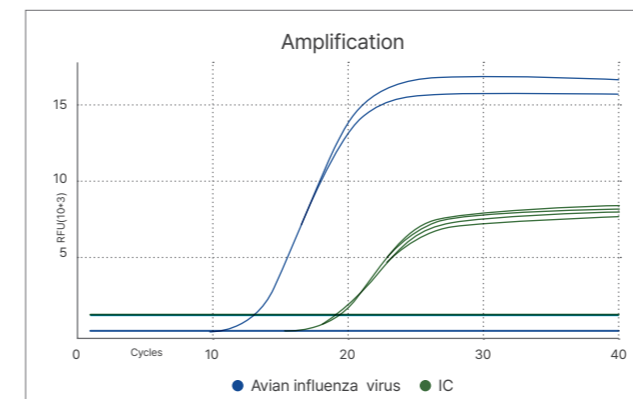
#Certificate of Free Sales product

No.	Cat. No.	Product	Description
1	SWPS-001	Opti™ IS-qPCR kit	<i>Isospora suis</i>
2	SWPS-002	Opti™ Ei-qPCR kit	<i>Eimeria</i> spp.
3	SWPM-003	#Opti™ Swine coccidiosis Multi-qPCR kit	<i>Isospora suis, Eimeria</i> spp.
4	SWPS-004	Opti™ Asu-qPCR kit	<i>Ascaris suum</i>
5	SWPS-005	Opti™ Echi-qPCR kit	<i>Echinococcus</i> spp.
6	SWPS-006	Opti™ Oeso-qPCR kit	<i>Oesophagostomun</i> spp.
7	SWPS-007	Opti™ Hru-qPCR kit	<i>Hyostromylus rubidus</i>
8	SWPS-008	Opti™ Mhi-qPCR kit	<i>Macracanthorhynchus hirudianceous</i>
9	SWPS-009	Opti™ MSt-qPCR kit	<i>Metastrongylus</i> spp.
10	SWPS-010	Opti™ Sde-qPCR kit	<i>Stephanura dentatus</i>
11	SWPS-011	Opti™ Str-qPCR kit	<i>Strongyloides</i> spp.
12	SWPS-012	Opti™ Tso-qPCR kit	<i>Taenia solium</i>
13	SWPS-013	Opti™ Toc-qPCR kit	<i>Toxocara</i> spp.
14	SWPS-014	Opti™ Tsp-qPCR kit	<i>Trichinella spiralis</i>
15	SWPS-015	Opti™ Tric-qPCR kit	<i>Trichostrongylus</i> spp.
16	SWPS-016	Opti™ Tsu-qPCR kit	<i>Trichuris suis</i>
17	SWPS-017	Opti™ Bab-qPCR kit	<i>Babesia</i> spp.
18	SWPS-018	Opti™ Bco-qPCR kit	<i>Balantidium coli</i>
19	SWPS-019	Opti™ Cpa-qPCR kit	<i>Cryptosporidium parvum</i>
20	SWPS-020	Opti™ Esu-qPCR kit	<i>Entamoeba suis</i>
21	SWPS-021	Opti™ Neos-qPCR kit	<i>Neospora</i> spp.
22	SWPS-022	Opti™ Smi-qPCR kit	<i>Sarcocystis miescheriana</i>
23	SWPS-023	Opti™ Ssu-qPCR kit	<i>Sarcocystis suis hominis</i>
24	SWPS-024	Opti™ Top-qPCR kit	<i>Toxoplasma</i> spp.
25	SWPS-025	Opti™ Tryp-qPCR kit	<i>Trypanosoma</i> spp.

## Opti™ AIV-qPCR kit (AVVS-001)

### Specification

- Approved by Korean Animal and Plant Quarantine Agency (APQA); No. 238-016
- Opti™ AIV-qPCR kit is an *in vitro* diagnostic reagent used to diagnose the M gene of Avian Influenza Virus (AIV).
- Sample: Avian Tissue, Feces etc.
- Running time : 50 – 70 Minutes



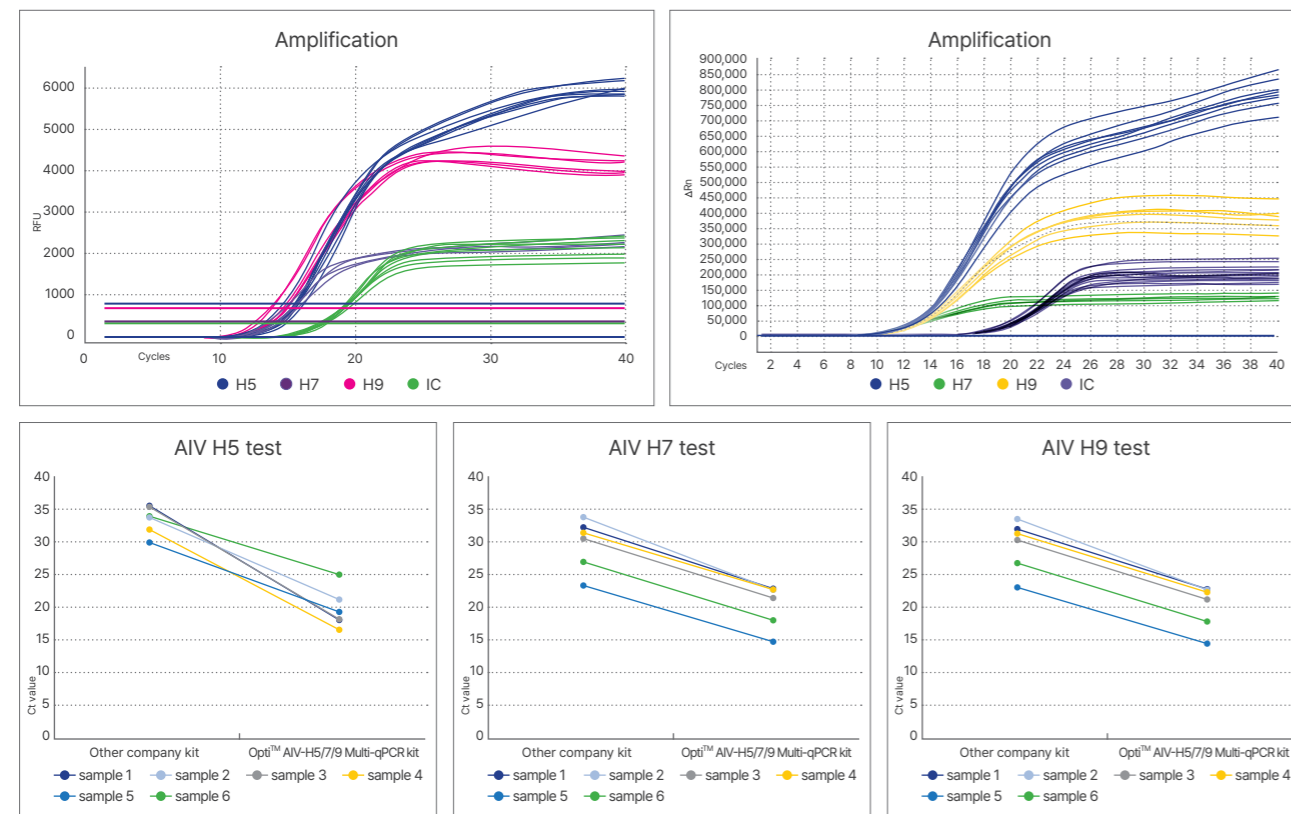
<Opti™ AIV-qPCR kit>

Opti™ AIV-qPCR kit showed the **higher sensitivity than the standard test (PCR) or other company kits in the same sample**. So you can do the **more accurate analysis** because you can get results reducing false positives and false negatives.

# Opti™ AIV-H5/7/9 Multi-qPCR kit (AVVM-008)

## ■ Specification

- Opti™ AIV-H5/7/9 Multi-qPCR kit is an *in vitro* diagnostic reagent that can simultaneously identify high pathogenic avian influenza (HPAI) 5/7/9 in AIV-positive samples.
- Sample: Avian Tissue, Feces etc.
- Running time : 50 – 70 Minutes



<qPCR results of Opti™ AIV-H5/7/9 Multi-qPCR kit>

Opti™ AIV-H5/7/9 Multi-qPCR kit showed the **higher sensitivity in each HPAI H5/7/9** than other company's products in the same positive samples.

## ■ Avian (Bateria)

No.	Cat. No.	Product	Description
1	AVBS-001	Opti™ SG-qPCR kit	<i>Salmonella gallinarum</i>
2	AVBS-002	Opti™ MG-qPCR kit	<i>Mycoplasma gallisepticum</i>
3	AVBS-003	Opti™ MS-qPCR kit	<i>Mycoplasma synoviae</i>
4	AVBS-004	Opti™ Sta-qPCR kit	<i>Staphylococcus</i> spp.
5	AVBS-005	Opti™ Ent-qPCR kit	<i>Enterococcus</i> spp.
6	AVBS-006	Opti™ CC-qPCR kit	<i>Clostridium colinum</i>
7	AVBS-007	Opti™ Eco-qPCR kit	<i>Escherichia coli</i>
8	AVBM-008	Opti™ SG/SP Multi-qPCR kit	<i>S. gallinarum, Salmonella pullorum</i>
9	AVBM-009	Opti™ Sal/Ent/Sta/MS Multi-qPCR kit	<i>Salmonella</i> spp., <i>Enterococcus</i> spp., <i>Staphylococcus</i> spp., <i>M. synoviae</i>
10	AVBM-010	Opti™ CP/CC/Sal/Eco Multi-qPCR kit	<i>Clostridium perfringens, C. colinum, Salmonella</i> spp., <i>E. coli</i>
11	AVBM-011	Opti™ Sal/PM/Eco/CC Multi-qPCR kit	<i>Salmonella</i> spp., <i>Pasteurella multocida, E. coli, C. colinum</i>
12	AVBM-012	Opti™ IC A/B/C Multi-qPCR kit	Infectious Coryza ( <i>Avibacterium paragallinarum</i> ), serotype A/B/C
13	AVBM-013	Opti™ Sal-4plex Multi-qPCR kit	<i>S. gallinarum, S. pullorum, S. enteritidis, S. typhimurium</i>

## ■ Avian (Virus)

\*Korean animal and Plant Quarantine Agency(APQA) approved product

No.	Cat. No.	Product	Description
1	AVVS-001	*Opti™ AIV-qPCR kit	Avian influenza virus
2	AVVS-002	Opti™ IBV-qPCR kit	Infectious brochitis virus
3	AVVS-003	Opti™ NDV-qPCR kit	Newcastle disease virus
4	AVVS-004	Opti™ FPV-qPCR kit	Fowl poxvirus
5	AVVS-005	Opti™ ILTV-qPCR kit	Infectious laryngotracheitis virus
6	AVVS-006	Opti™ FAdV-qPCR kit	Fowl adenovirus
7	AVVM-007	Opti™ AIV/NDV/IBV/APV Multi-qPCR kit	Avian influenza virus, Newcastle disease virus, Infectious brochitis virus, Avian metapneumovirus A/B
8	AVVM-008	Opti™ AIV-H5/7/9 Multi-qPCR kit	Highly pathogenic avian influenza H5/7/9
9	AVVM-009	Opti™ APV Multi-qPCR kit	Avian metapneumovirus A/B/C/D
10	AVVM-010	Opti™ FAdV/4/8b/11 Multi-qPCR kit	Fowl adenovirus, Infectious laryngotracheitis virus
11	AVVM-011	Opti™ FPV/ILTV Multi-qPCR kit	Fowl poxvirus, Infectious laryngotracheitis virus
12	AVVM-012	Opti™ IBV-typing Multi-qPCR kit	Infectious brochitis virus QX/K2/B4
13	AVVM-013	Opti™ AIV-H5/7 Multi-qPCR kit	Highly pathogenic avian influenza H5/7
14	AVVS-014	Opti™ AIV-H5 qPCR kit	Highly pathogenic avian influenza 5
15	AVVS-015	Opti™ AIV-H7 qPCR kit	Highly pathogenic avian influenza 7
16	AVVS-016	Opti™ AIV-H9 qPCR kit	Highly pathogenic avian influenza 9

## ■ Avian (Parasite)

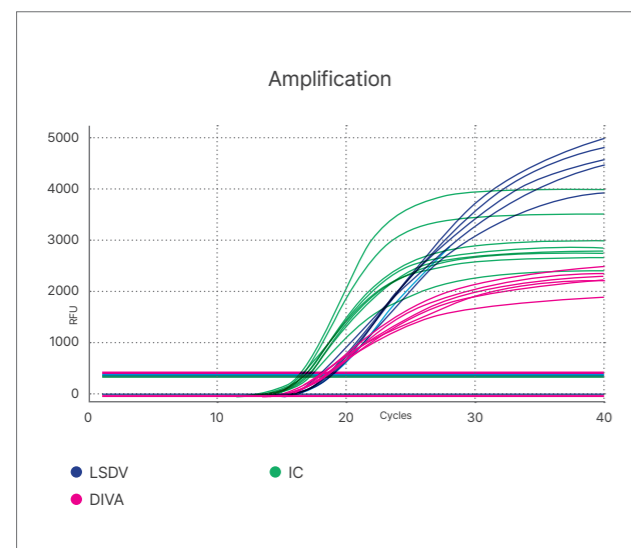
No.	Cat. No.	Product	Description
1	AVPS-001	Opti™ Ene-qPCR kit	<i>Eimeria necatrix</i>
2	AVPS-002	Opti™ Ete-qPCR kit	<i>Eimeria tenella</i>
3	AVPS-003	Opti™ Ema-qPCR kit	<i>Eimeria maxima</i>
4	AVPS-004	Opti™ Ebr-qPCR kit	<i>Eimeria brunetti</i>
5	AVPS-005	Opti™ Eac-qPCR kit	<i>Eimeria acervulina</i>
6	AVPS-006	Opti™ Emi-qPCR kit	<i>Eimeria mitis</i>
7	AVPS-007	Opti™ Epr-qPCR kit	<i>Eimeria praecox</i>
8	AVPM-005	Opti™ Avian coccidiosis I Multi-qPCR kit	<i>Eimeria maxima, E. necatrix, E. brunetti, E. tenella</i>
9	AVPM-006	Opti™ Avian coccidiosis II Multi-qPCR kit	<i>Eimeria acervulina, E. mitis, E. praecox</i>

# OPTIPHARM 's Bovine kit

## ■ Specification

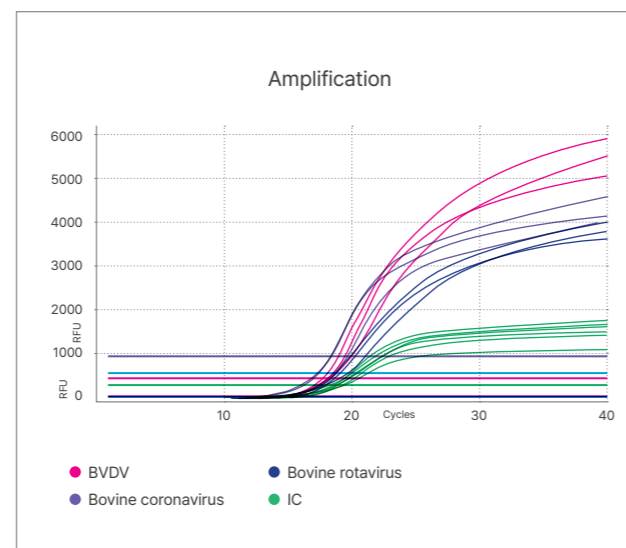
- OPTIPHARM 's Bovine-qPCR kit is an *in vitro* diagnostic reagent used to diagnose various diseases in bovine.
- Sample : Bovine Blood, Serum, Tissue, Feces etc.
- Running time : 50 – 70 Minutes

<Opti™ LSDV Multi-qPCR kit>



- Catalog No. BOVM-015
- Lumpy skin disease virus (LSDV)
- Differentiation of infected from Vaccinated animals (DIVA)
- Internal control (IC)

<Opti™ BVDV/BCoV/BRV Multi-qPCR kit>



- Catalog No. BOVM-008
- Bovine viral diarrhea virus (BVDV)
- Bovine coronavirus (BCoV)
- Bovine rotavirus (BRV)
- Internal control (IC)

## ■ Bovine (Bacteria)

No.	Cat. No.	Product	Description
1	BOBS-001	Opti™ CBPP-qPCR kit	<i>Bovine mycoplasma mycoides</i>
2	BOBS-002	Opti™ Cbo-qPCR kit	<i>Corynebacterium bovis</i>

## ■ Bovine (Virus)

No.	Cat. No.	Product	Description
1	BOVS-001	Opti™ BVDV-qPCR kit	Bovine viral diarrhea virus
2	BOVS-002	Opti™ BCoV-qPCR kit	Bovine coronavirus
3	BOVS-003	Opti™ BRV-qPCR kit	Bovine rotavirus
4	BOVS-004	Opti™ BoHV-1-qPCR kit	Bovine alphaherpesvirus 1
5	BOVS-005	Opti™ PIV3-qPCR kit	Bovine parainfluenza virus type 3
6	BOVS-006	Opti™ BRSV-qPCR kit	Bovine respiratory syncytial virus
7	BOVS-007	Opti™ BIDV-qPCR kit	Bovine Influenza D virus
8	BOVM-008	Opti™ BVDV/BCoV/BRV Multi-qPCR kit	Bovine viral diarrhea virus, Bovine coronavirus, Bovine rotavirus
9	BOVS-009	Opti™ PPRV-qPCR kit	Bovine peste des petits ruminants virus
10	BOVS-010	Opti™ LSDV-qPCR kit	Bovine Lumpy skin disease virus
11	BOVS-012	Opti™ RVFV-qPCR kit	Bovine rift valley fever virus
12	BOVS-014	Opti™ CPXV-qPCR kit	Cowpox virus
13	BOVM-015	Opti™ LSDV Multi-qPCR kit	Lumpy skin disease virus, Differentiation of infected from Vaccinated Animals (DIVA)

# OPTIPHARM 's Honeybee kit

## ▪ Specification

- OPTIPHARM 's Honeybee kits are *in vitro* diagnostic reagents for the diagnosis of honeybee diseases that cause enormous damage to the honeybee industry.
- Sample: Honeybee Larva, Tissue etc.
- Running time : 50 – 70 Minutes

## ▪ Honeybee (Bacteria)

No.	Cat. No.	Product	Description
1	HBBS-001	Opti™ AFB-qPCR kit	American Foulbrood
2	HBBS-002	Opti™ EFB-qPCR kit	European Foulbrood
3	HBBM-003	Opti™ AFB/EFB Multi-qPCR kit	American Foulbrood, European Foulbrood

## ▪ Honeybee (Virus)

No.	Cat. No.	Product	Description
1	HBVS-001	Opti™ SBV-qPCR kit	Sacbrood virus
2	HBVS-002	Opti™ KSBV-qPCR kit	Korean Sacbrood virus
3	HBVS-003	Opti™ ABPV-qPCR kit	Acute bee paralysis
4	HBVS-004	Opti™ BQCV-qPCR kit	Black queen cell virus
5	HBVS-005	Opti™ CBPV-qPCR kit	Chronic bee paralysis
6	HBVS-006	Opti™ DWV-qPCR kit	Deformed wing virus
7	HBVS-007	Opti™ IAPV-qPCR kit	Israel acute paralysis
8	HBVS-008	Opti™ KBV-qPCR kit	Kashmir bee virus
9	HBVM-009	Opti™ SBV/KSBV/CBPV/IAPV Multi-qPCR kit	Sacbrood virus, Korean Sacbrood virus, Chronic bee paralysis, Israel acute paralysis
10	HBVM-010	Opti™ BQCV/DWV/ABPV/KBV Multi-qPCR kit	Black queen cell virus, Deformed wing virus, Acute bee paralysis, Kashmir bee virus

## ▪ Honeybee (Fungi)

No.	Cat. No.	Product	Description
1	HBFS-001	Opti™ CB-qPCR kit	Chalkbrood ( <i>Ascosphaera apis</i> )
2	HBFS-002	Opti™ NS-qPCR kit	Nosemosis ( <i>Nosema apis</i> , <i>N. ceranae</i> , <i>N. bambi</i> )
3	HBFS-003	Opti™ SB-qPCR kit	Stonebrood ( <i>Aspergillus flavus</i> )
4	HBFM-004	Opti™ SB/CB/NS Multi-qPCR kit	Stonebrood, Chalkbrood, Nosemosis

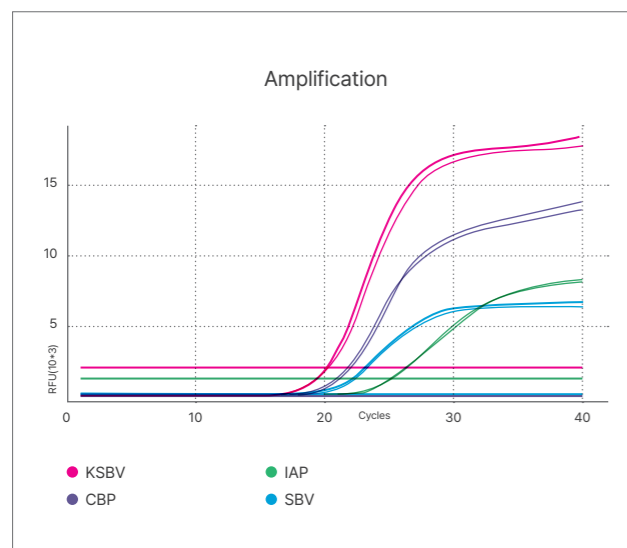
## ▪ Honeybee (Parasite)

No.	Cat. No.	Product	Description
1	HBPS-001	Opti™ Aca-qPCR kit	Acarapisosis ( <i>Acarapis woodi</i> )
2	HBPS-002	Opti™ PFI-qPCR kit	Phorid fly infestation ( <i>Apocephalus borealis</i> )
3	HBPM-003	Opti™ Aca/PFI Multi-qPCR kit	Acarapisosis, Phorid fly infestation

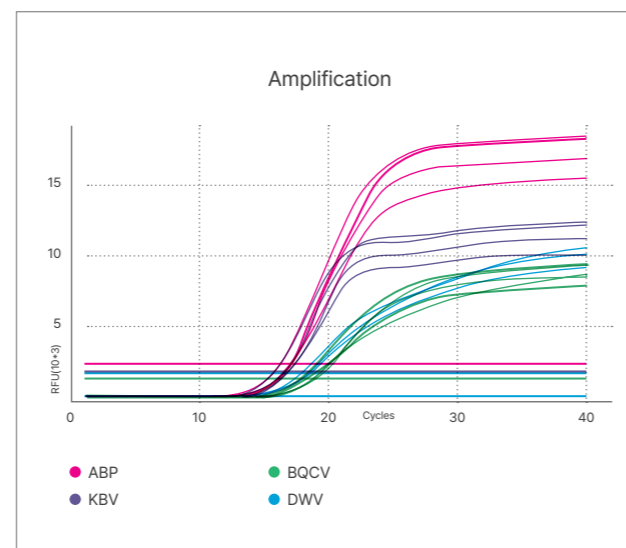
## ▪ Honeybee (Bacteria-Parasite)

No.	Cat. No.	Product	Description
1	HBBP-001	Opti™ AFB/EFB/Aca/PFI Multi-qPCR kit	American Foulbrood, European Foulbrood, Acarapisosis, Phorid fly infestation

<Opti™ SBV/KSBV/CBPV/IAPV Multi-qPCR kit>



<Opti™ BQCV/DWV/ABPV/KBV Multi-qPCR kit>



- Catalog No. HBVM-009
- Sacbrood virus (SBV)
- Korean Sacbrood virus (KSBV)
- Chronic bee paralysis (CBPV)
- Israel acute paralysis (IAPV)

- Catalog No. HBVM-010
- Black queen cell virus (BQCV)
- Deformed wing virus (DWV)
- Acute bee paralysis (ABPV)
- Kashmir bee virus (KBV)

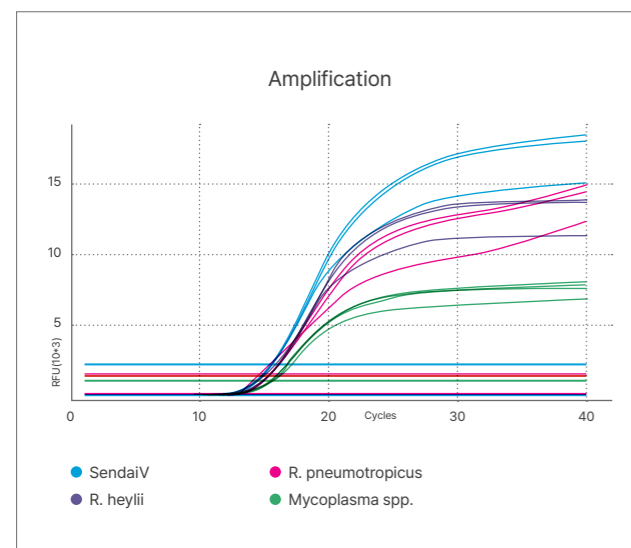


# OPTIPHARM 's Laboratory animal kit

## Specification

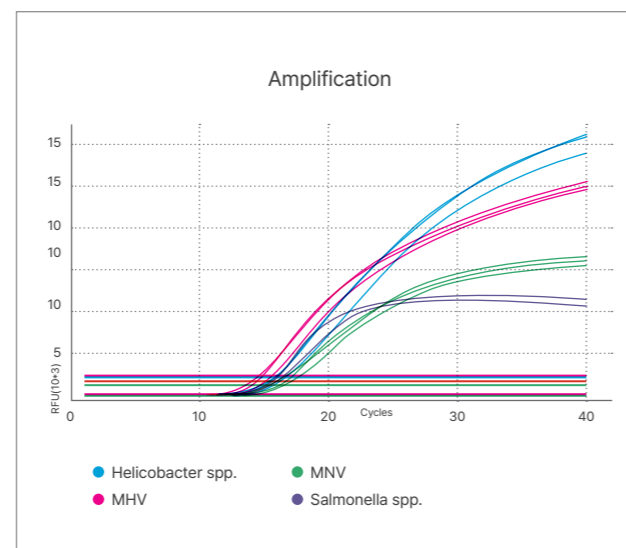
- OPTIPHARM 's Laboratory animal kits are *in vitro* diagnostic reagents that can rapidly and accurately diagnose the presence or absence of infectious diseases required to ensure microbiological and genetic quality in laboratory animals.
- Sample: Laboratory animal (mouse, rat, guinea pig, rabbit, mini-pig) Blood, Serum, Tissue, Feces etc.
- Running time : 50 – 70 Minutes

<Opti™ SeV/MP/Rpn/Rhey Multi-qPCR kit>



- Catalog No. LAVM-016
- Sendai virus (SeV)
- Mycoplasma* spp. (MP)
- Rodentibacter pneumotropicus* (Rpn)
- Rodentibacter heyllii* (Rhey)

<Opti™ MHV/MNV/Sal/Hel Multi-qPCR kit>



- Catalog No. LAVM-017
- Mouse hepatitis virus (MHV)
- Murine norovirus (MNV)
- Salmonella* spp. (Sal)
- Helicobacter* spp. (Hel)

## Laboratory animal (Bacteria)

No.	Cat. No.	Product	Description
1	LABS-001	Opti™ BB-qPCR kit	<i>Bordetella bronchiseptica</i>
2	LABS-002	Opti™ Cku-qPCR kit	<i>Corynebacterium kutscheri</i>
3	LABS-003	Opti™ Cro-qPCR kit	<i>Citrobacter rodentium</i>
4	LABS-004	Opti™ Fro-qPCR kit	<i>Filobacterium rodentium</i>
5	LABS-005	Opti™ Hel-qPCR kit	<i>Helicobacter</i> spp.
6	LABS-006	Opti™ Kpn-qPCR kit	<i>Klebsiella pneumoniae</i>
7	LABS-007	Opti™ Mpu-qPCR kit	<i>Mycoplasma</i> spp. ( <i>M. pulmonis</i> )
8	LABS-008	Opti™ Pae-qPCR kit	<i>Pseudomonas aeruginosa</i>
9	LABS-009	Opti™ PM-qPCR kit	<i>Pasteurella multocida</i>
10	LABS-010	Opti™ Rhey-qPCR kit	<i>Rodentibacter heyllii</i>
11	LABS-011	Opti™ Rpn-qPCR kit	<i>Rodentibacter pneumotropicus</i>
12	LABS-012	Opti™ Saga-qPCR kit	<i>Streptococcus agalactiae</i>
13	LABS-013	Opti™ Sal-qPCR kit	<i>Salmonella</i> spp.
14	LABS-014	Opti™ Sau-qPCR kit	<i>Staphylococcus aureus</i>
15	LABS-015	Opti™ Smo-qPCR kit	<i>Streptobacillus moniliformis</i>
16	LABS-016	Opti™ Spn-qPCR kit	<i>Streptococcus pneumoniae</i>
17	LABS-017	Opti™ Spyo-qPCR kit	<i>Streptococcus pyogene</i>
18	LABM-018	Opti™ Sau/Smo/Cku/Pae Multi-qPCR kit	<i>S. aureus</i> , <i>S. moniliformis</i> , <i>Corynebacterium kutscheri</i> , <i>Pseudomonas aeruginosa</i>
19	LABS-019	Opti™ Szoo-qPCR kit	<i>Streptococcus equi</i> subsp. <i>zooepidermicus</i>
20	LABS-020	Opti™ Cpil-qPCR kit	<i>Clostridium piliforme</i>

## Laboratory animal (Virus)

No.	Cat. No.	Product	Description
1	LAVS-001	Opti™ MHV-qPCR kit	Mouse hepatitis virus
2	LAVS-002	Opti™ SeV-qPCR kit	Sendai virus
3	LAVS-003	Opti™ MNV-qPCR kit	Murine norovirus
4	LAVS-004	Opti™ RTV-qPCR kit	Rat theilovirus
5	LAVS-005	Opti™ SV5-qPCR kit	Simian virus 5 (Parainfluenza virus 5)
6	LAVS-006	Opti™ MVM-qPCR kit	Pneumonia virus of mice
7	LAVS-007	Opti™ MAV1-qPCR kit	Mouse adenovirus type 1
8	LAVS-008	Opti™ GCMV-qPCR kit	Guinea pig Cytomegalovirus
9	LAVS-009	Opti™ LCMV-qPCR kit	Guinea pig Lymphocytic choriomeningitis virus
10	LAVS-010	Opti™ Reo-3-qPCR kit	Reovirus 3
11	LAVS-011	Opti™ RHDV-qPCR kit	Rabbit hemorrhagic disease virus
12	LAVS-012	Opti™ RRV-qPCR kit	Rabbit rotavirus
13	LAVS-013	Opti™ MV-qPCR kit	Myxoma virus
14	LAVS-014	Opti™ RPV-qPCR kit	Rabbit poxvirus
15	LAVS-015	Opti™ MVM-qPCR kit	Minute virus of mice
16	LAVM-016	Opti™ SeV/MP/Rpn/Rhey Multi-qPCR kit	Sendai virus, <i>Mycoplasma</i> spp., <i>R. pneumotropicus</i> , <i>R. heyllii</i>
17	LAVM-017	Opti™ MHV/MNV/Sal/Hel Multi-qPCR kit	Mouse hepatitis virus, Murine norovirus, <i>Salmonella</i> spp., <i>Helicobacter</i> spp.
18	LAVS-018	Opti™ MTV-qPCR kit	Mouse thymic virus
19	LAVM-019	Opti™ SeV/LCMV/BB/PM Multi-qPCR kit	Sendai virus, Guinea pig Lymphocytic choriomeningitis virus, <i>B. bronchiseptica</i> , <i>P. multocida</i>

## ▪ Laboratory animal (Fungi)

No.	Cat. No.	Product	Description
1	LAFS-001	Opti™ Ecu-qPCR kit	<i>Encephalitozoon cuniculi</i>
2	LAFS-002	Opti™ Pji-qPCR kit	<i>Pneumocystis jirovecii</i>
3	LAFS-003	Opti™ Pca-qPCR kit	<i>Pneumocystis carinii</i>
4	LAFS-004	Opti™ Pmu-qPCR kit	<i>Pneumocystis murina</i>

## ▪ Laboratory animal (Parasite)

No.	Cat. No.	Product	Description
1	LAPS-001	Opti™ Sob-qPCR kit	<i>Syphacia obvelata</i>
2	LAPS-002	Opti™ Smu-qPCR kit	<i>Syphacia muris</i>
3	LAPS-003	Opti™ Ate-qPCR kit	<i>Aspiculuris tetraptera</i>
4	LAPS-004	Opti™ Ttm-qPCR kit	<i>Tritrichomonas</i> spp.
5	LAPS-005	Opti™ Tmu-qPCR kit	<i>Tritrichomonas muris</i>
6	LAPS-006	Opti™ Emo-qPCR kit	<i>Entamoeba</i> spp.
7	LAPS-007	Opti™ Emu-qPCR kit	<i>Entamoeba muris</i>
8	LAPS-008	Opti™ Cma-qPCR kit	<i>Chilomastix</i> spp.
9	LAPS-009	Opti™ Oin-qPCR kit	<i>Octomitus intestinalis</i>
10	LAPS-010	Opti™ Hm-qPCR kit	<i>Hexamita</i> spp.
11	LAPS-011	Opti™ Gmu-qPCR kit	<i>Giardia muris</i>
12	LAPS-012	Opti™ Smu-qPCR kit	<i>Spironucleus muris</i>
13	LAPS-013	Opti™ Csp-qPCR kit	<i>Cryptosporidium</i> spp.
14	LAPM-014	Opti™ Cma/Ttm/Oin/Emo Multi-qPCR kit	<i>Chilomastix</i> spp., <i>Tritrichomonas</i> spp., <i>O. intestinalis</i> , <i>Entamoeba</i> spp.
15	LAPM-015	Opti™ Sob/Smu/Ei/Ate Multi-qPCR kit	<i>S. obvelata</i> , <i>S. muris</i> , <i>Eimeria</i> spp., <i>A. tetraptera</i>
16	LAPM-016	Opti™ Hm/Smu/Csp/Gmu Multi-qPCR kit	<i>Hexamita</i> spp., <i>S. muris</i> , <i>Cryptosporidium</i> spp., <i>G. muris</i>

## ▪ Food (Bacteria)

No.	Cat. No.	Product	Description
1	FOBS-001	Opti™ Eco-qPCR kit	<i>Escherichia coli</i>
2	FOBS-002	Opti™ Sau-qPCR kit	<i>Staphylococcus aureus</i>
3	FOBS-003	Opti™ Lmo-qPCR kit	<i>Listeria monocytogenes</i>
4	FOBS-004	Opti™ Sal-qPCR kit	<i>Salmonella</i> spp.
5	FOBM-005	Opti™ Sent-qPCR kit	<i>Salmonella enteritidis</i>
6	FOBS-006	Opti™ Styp-qPCR kit	<i>Salmonella typhimurium</i>
7	FOBS-007	Opti™ Cje-qPCR kit	<i>Campylobacter jejuni</i>
8	FOBS-008	Opti™ Cco-qPCR kit	<i>Campylobacter coli</i>
9	FOBS-009	Opti™ Cp-qPCR kit	<i>Clostridium perfringens</i>
10	FOBS-010	Opti™ Yent-qPCR kit	<i>Yersinia enterocolitica</i>
11	FOBS-011	Opti™ Shi-qPCR kit	<i>Shigella</i> spp.
12	FOBS-012	Opti™ Bce-qPCR kit	<i>Bacillus cereus</i>
13	FOBM-013	Opti™ Sal-3plex Multi-qPCR kit	<i>Salmonella</i> spp., <i>S. enteritidis</i> , <i>S. typhimurium</i>
14	FOBM-014	Opti™ Food-I Multi-qPCR kit	Enterohemorrhagic <i>Escherichia coli</i> (VT1, VT2), <i>Salmonella</i> spp., <i>Y. enterocolitica</i>
15	FOBM-015	Opti™ Food-II Multi-qPCR kit	<i>S. aureus</i> , <i>Shigella</i> spp., <i>B. cereus</i>
16	FOBM-016	Opti™ Food-III Multi-qPCR kit	<i>C. perfringens</i> , <i>C. jejuni</i> , <i>C. coli</i> , <i>L. monocytogenes</i>

## ▪ Food (Enteric *Escherichia coli*)

No.	Cat. No.	Product	Description
1	ECBM-001	Opti™ EHEC-I Multi-qPCR kit	Enterohemorrhagic <i>Escherichia coli</i> (VT1, VT2)
2	ECBM-002	Opti™ STEC Multi-qPCR kit	Shiga toxin-producing <i>Escherichia coli</i> (STx2e, F18)
3	ECBM-003	Opti™ EPEC Multi-qPCR kit	Enteropathogenic <i>Escherichia coli</i> (bfpA, EaeA)
4	ECBM-004	Opti™ EPEC/STEC Multi-qPCR kit	Enteropathogenic <i>Escherichia coli</i> (bfpA, EaeA), Shiga toxin-producing <i>Escherichia coli</i> (STx2e, F18)
5	ECBM-005	Opti™ ETEC-I Multi-qPCR kit	Enterotoxigenic <i>Escherichia coli</i> (LT, STa, STb, EAST1)
6	ECBM-006	Opti™ ETEC-II Multi-qPCR kit	Enterotoxigenic <i>Escherichia coli</i> (F4, F5, F6, F41)