

ON THE SPOT

BENEFIT

SPECIALIZED

ACCURATE & STABLE DIAGNOSTICS

ABSOLOGY

Save More Lives,
Make Healthy Conditions





Save More Lives, Make Healthy Conditions

We ABSOLOGY have been doing Immunoassay system developing and manufacturing business.

Our product 'ABSOL', which is named from ABSOLute standard, is bringing a new paradigm and leading the market putting values on healthy living of everyone.

ABSOLOGY provides a reliable In-vitro diagnostic system with innovative technology and improved usability out there and aims to global company in near future.

ABSOL

Point-of-Care Immunoassay System with Microfluidics Technology



ACCURATE & STABLE DIAGNOSTICS

- **Quantitative results based on FIA:** ABSOL is an automated fluorescent immunoassay (FIA) analyzer. It is designed to a POCT near patient testing device. It provides quantitative results based on immunoassay technology.
- **Microfluidic technology with Active flow control:** The Absoluty cartridges utilize microfluidics lateral flow technology where the analyte of interest in the sample forms immune complexes while moving through the pathway in the cartridges. Inside ABSOL Analyzer, built-in on/off valve system can actively control the flow of specimen, so test results are reliable. Actually the active flow system makes the flow pause at the point of reaction, it is designed to mix specimen and reagent and react them well.
- **Built-in heating tray:** Inside ABSOL Analyzer, built-in heating tray adjusts to our body temperature during the test, we maximize the biological reaction and improve the reliability of results. Additionally, built-in thermal printer makes users more convenient.



Duo & Combo Test available

2 other tests available with 1 cartridge
2 samples' test available with 1 cartridge

Each cartridge has two channel
and we can combine several tests in one channel.
For competitive price, this would be negotiable.



ON THE SPOT

Test time: 5 min.
Quick diagnosis & treatment
& Rise patients' satisfaction



LOW MAINTENANCE

QC Control with QC cartridge(Analyzer) & Code chip(Reagent)

Analyzer: Regular check using QC cartridge provided per each analyzer

Reagent: Code-chip (incl. calibration data, lot information, etc.) provided per each cartridge box.

Before proceed the test with cartridge, insert code chip to the USB port on the backside of ABSOL



Make healthy conditions

Thyroid	TSH	Cardiac	Troponin I
	Free T4		NT-proBNP
	TSH & FT4 Combo		TnI & CK-MB Duo
Urology	PSA	Respiratory	TnI & CK-MB & NT-proBNP Combo
	Testosterone		COVID-19 IgM/IgG Combo
Bone Metabolism	Vitamin D		COVID-19 Ag
	PTH		COVID-19 Neutralizing Ab
Inflammation	PCT		COVID-19 TAb & NAb Combo
	PCT & CRP Combo		Influenza A/B
Adrenal	Cortisol		Influenza A/B & COVID-19 Ag Combo



THYROID

MFDS 



TSH

Thyroid-stimulating hormone (also known as thyrotropin, thyrotrophic hormone, TSH, or hTSH for human TSH) is a pituitary hormone that stimulates the thyroid gland to produce thyroxine (T4), and then triiodothyronine (T3) which stimulates the metabolism of almost every tissue in the body. It is a glycoprotein hormone synthesized and secreted by thyrotrope cells in the anterior pituitary gland, which regulates the endocrine function of the thyroid.

MFDS 



Free T4

Thyroxine, also known as T4, is a type of thyroid hormone regulating your weight, body temperature, muscle strength, and even your mood. Free T4 is not affected by the level of TBG(Thyroxine-Binding Globulin) and reflects thyroid function more accurately. Measuring the level of Free T4 to help check if three organs(hypothalamus, pituitary and thyroid) are functioning normally and diagnose hypothyroidism, hyperthyroidism and so on.

MFDS 



TSH & FT4 Combo

Changes in TSH can serve as an “early warning system” – often occurring before the actual level of thyroid hormones in the body becomes too high or too low. A high TSH level indicates that the thyroid gland is not making enough thyroid hormone (primary hypothyroidism). The opposite situation, in which the TSH level is low, usually indicates that the thyroid is producing too much thyroid hormone (hyperthyroidism). Occasionally, a low TSH may result from an abnormality in the pituitary gland, which prevents it from making enough TSH to stimulate the thyroid (secondary hypothyroidism). Testing both TSH and Free T4 at once helps diagnosis whether it is primary or secondary disorders.

Test Item	AMR	Sample Type	Sample Volume	Test Time
TSH	0.06 ~ 25.00 mIU/L (uIU/mL)	Serum or Plasma	50 µL	5 min.
Free T4	0.40 ~ 6.00 ng/dL	Serum or Plasma	50 µL	5 min.
TSH & FT4 Combo	TSH - 0.06 ~ 25.00 mIU/L (uIU/mL) FT4 - 0.40 ~ 6.00 ng/dL	Serum or Plasma	100 µL	5 min.



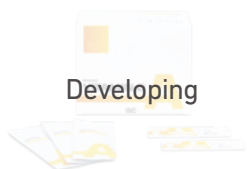
BONE METABOLISM

MFDS 



Vitamin D

Measuring the level of Vitamin D is to help avoid many diseases; depression, high blood pressure, bone softening, advancement of cancer and also cardiovascular disease. Vitamin D provides the proper balance of calcium and phosphorus to support mineralization with bone.



PTH (Parathyroid hormone)

Parathyroid hormone (PTH), also called parathormone or parathyrin, is a peptide hormone secreted by the parathyroid glands that regulates the serum calcium concentration through its effects on bone, kidney, and intestine. PTH influences bone remodeling, which is an ongoing process in which bone tissue is alternately resorbed and rebuilt over time.

Test Item	AMR	Sample Type	Sample Volume	Test Time
Vitamin D	10.00 ~ 110.00 ng/mL	Serum or Plasma	50 µL	33 min.

UROLOGY

MFDS CE



PSA

Measuring the level of PSA is to help screening prostate cancer before DRE, Ultrasound exam or MRI scan and monitoring prostate diseases. It is also a requisite test prior to Testosterone injection. PSA is present in small quantities in the serum of men with healthy prostates, but is often elevated in the presence of prostate cancer or other prostate disorders: Prostate cancer is the 1st prevalent & 3rd most deadly cancer for men with newly diagnosed 670K patients per year worldwide.

MFDS CE



Testosterone

Measuring the level of Testosterone is to help stimulates sperm production, sexuality, and build muscles and bones. Testosterone deficiency related difficulty in an erection or spontaneous erections, decline in sex drive or decrease in the volume of semen, a loss muscle/bone mass and strength and facial hair, and fatigue despite getting plenty of sleep or low motivation.

Test Item	AMR	Sample Type	Sample Volume	Test Time
PSA	0.02 ~ 25.00 ng/mL	Serum or Plasma	50 µL	5 min.
Testosterone	0.20 ~ 15.00 ng/mL	Serum or Plasma	50 µL	5 min.

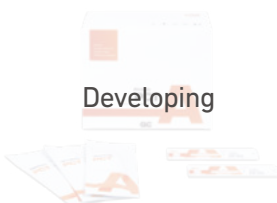
INFLAMMATION

MFDS CE



PCT (Procalcitonin)

Measuring the level of PCT is to help detect sepsis and systemic bacterial infections in the early stages and monitor the treatment. PCT could be a guide of antibiotic therapy, helping make physicians' decision of patients in ICU and reduce the duration of antibiotic therapy.



CRP (C-Reactive Protein)

Measuring the level of CRP(C-Reactive Protein) is to help check for inflammation in the body with PCT. CRP is produced by the liver and the level of CRP rises when there is inflammation throughout the body.

Test Item	AMR	Sample Type	Sample Volume	Test Time
PCT	0.05 ~ 35.00 ng/mL	Serum or Plasma	50 µL	5 min.

ADRENAL

MFDS CE



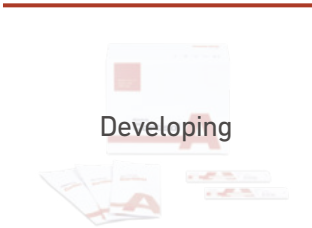
Cortisol

Measuring the level of Cortisol is to help diagnose disorders of adrenal glands including Cushing's syndrome and Addison's disease and to evaluate stress. Cortisol blood test is used for screening and if needed, clarify with further ACTH stimulation test or LDDS test.

Test Item	AMR	Sample Type	Sample Volume	Test Time
Cortisol	0.50 ~ 25.00 ng/mL	Serum or Plasma	50 µL	5 min.

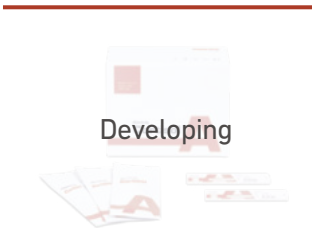


CARDIAC



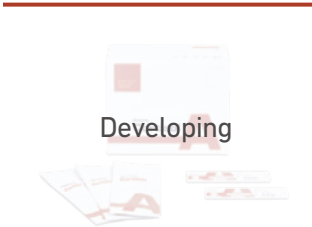
Troponin I

Troponin is released during MI from the cytosolic pool of myocytes. Its subsequent release is prolonged with degradation of actin and myosin filaments. Measuring the level of Troponin I is to help to rule out Myocardial Infarction(MI) early. The high specificity of cTnI measurements is beneficial in identifying cardiac injury for clinical conditions involving skeletal muscle injury resulting from surgery, trauma, extensive exercise, or muscular disease.



NT-proBNP

NT-proBNP is used as a predictor of Heart Failure (HF). NT-proBNP is typically increased in patients with asymptomatic or symptomatic left ventricular dysfunction and are associated with Coronary artery disease (CAD) and myocardial ischemia.



TnI & CK-MB Duo

CK-MB is used to determine if you had a heart attack, the level of it increases 3-4 hours after chest pain in MI patients. Measuring the level of CK-MB is to help detect reinfarction because CK levels return to baseline 36-48 hours after AMI. Testing both Troponin I and CK-MB at once helps diagnosis of cardiovascular diseases.

Test Item	AMR	Sample Type	Sample Volume	Test Time
Troponin I	10 ~ 2,000 pg/mL	Serum or Plasma	50 µL	5 min.
NT-proBNP	15 ~ 10,000 pg/mL	Serum or Plasma	50 µL	5 min.
TnI & CK-MB Duo	Troponin I - 10 ~ 2,000 pg/mL CK-MB - 0.2 ~ 50 ng/mL	Serum or Plasma	100 µL	5 min.

RESPIRATORY

MFDS CE



COVID-19 IgM/IgG Combo

Absoludy COVID-19 IgM/IgG Combo gives clinical decision-making for patients suspected of COVID-19 (coronavirus) infection. Nucleoprotein antibody of virus. The Absoludy COVID-19 IgM/IgG Combo is an in vitro fluorescent nanoparticle immunoassay intended for qualitative detection of IgM and IgG antibodies to SARS-CoV-2 in human serum and plasma.

MFDS CE



COVID-19 Ag

Measuring the level of COVID-19 Ag gives clinical decision-making for patients suspected of COVID-19 (coronavirus) infection. The Absoludy COVID-19 Ag is an in vitro fluorescent nanoparticle immunoassay intended for qualitative detection of nucleocapsid protein antigen from SARS-CoV-2 in Nasopharyngeal and Oropharyngeal specimens directly collected from individuals.

MFDS CE



COVID-19 NAb (Neutralizing Antibody)

Measuring the level of COVID-19 Neutralizing Antibody is to help check the overall vaccine efficacy, compare efficacy of different vaccine candidates, monitor longevity of protective immunity and lead to herd immunity. Absoludy COVID-19 NAb is the SARS-CoV-2 surrogate virus neutralization test that detects total immunodominant neutralizing antibodies targeting the viral spike (S) protein receptor-binding domain in an isotype- and species-independent manner.



Influenza A/B

Measuring the level of Influenza A/B is to help detect Influenza A and B virus.

Test Item	Performance	Sample Type	Sample Volume	Test Time
COVID-19 IgM/IgG Combo	Sensitivity: 91.67% Specificity: 100%	Serum or Plasma	20 µL	5 min.
COVID-19 Ag	Sensitivity: 98% Specificity: 99%	Nasopharyngeal or oropharyngeal swab	50 µL	5 min.
COVID-19 NAb	Sensitivity: 100% Specificity: 100%	Serum	40 µL	6 min.

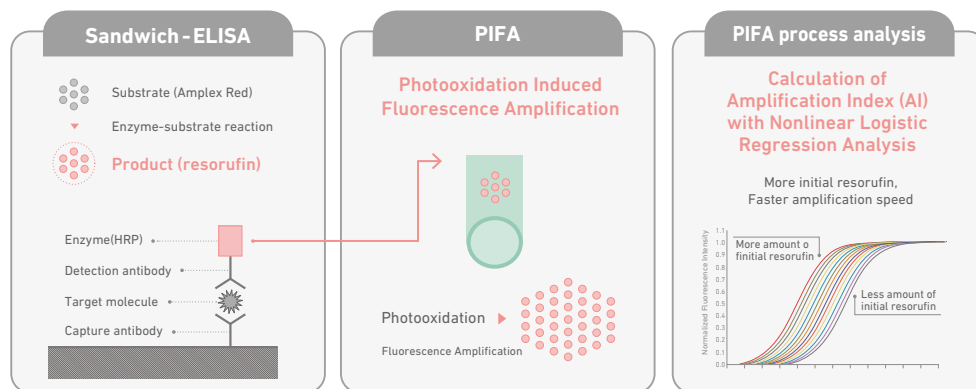
ABSOL HS

High-sensitivity Portable ELISA System



PIFA Technology (Photooxidation Induced Fluorescence Amplification)

ABSOL HS amplifies a fluorescence signal by adding a photooxidation reaction to a fluorescence signal that has not been accurately measured before. By analyzing the amplification curve of the fluorescent signal, the amount of target protein in a very small amount can be measured in reverse.



Stability

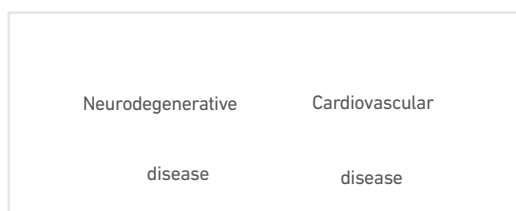
Built-in heating tray

ABSOL HS Adjusts temperature to 37°C and give the best condition for immune reaction.



Pioneering tests

ABSOL HS diagnoses the Alzheimer's and cardiovascular diseases, including mild cognitive impairment.



Convenience

Test time: 30 min.

Sample type: Serum or Plasma

Simply have a high-sensitivity test with blood.



Save more Lives

Neurodegenerative disease	Beta Amyloid Oligomer	Cardiovascular disease	High Sensitive Troponin I
	Aβ 42/40 ratio		
	p-Tau181		
	p-Tau217		
	NfL(Neurofilament light)		



CARDIOVASCULAR DISEASE

MFDS CE



High Sensitive Troponin I

High Sensitive Troponin I is for detecting myocardial infarction (MI) and assessing risk of adverse events in patients presenting with ischemic symptoms suggestive of acute coronary syndrome. Measuring the level of Ultra-Troponin I to exclude Acute myocardial infarction(AMI) from other myocardial injury particularly suitable for emergency testing.

Test Item	AMR	Sample Type	Sample Volume	Test Time
High Sensitive Troponin I	1.0 ~ 15000.0 pg/mL	Serum or Plasma	20 µL	30 min.

NEURODEGENERATIVE DISEASE



Beta Amyloid Oligomer & A β 42/40 ratio

Alzheimer's disease is the most common type of dementia which it begins with mild cognitive impairment and possibly leading to loss of the ability to communicate coherently and/or experience a decline in physical abilities. The deposition of beta amyloid 42/40 and oligomerized beta amyloid within the brain is a major hallmark of Alzheimer's disease. Absoludy Beta-Amyloid and Absoludy beta amyloid 42/40 ratio are PIFA Technology (Photooxidation induced Fluorescence Amplification) based quantitative measuring diagnostic test which it can diagnosis of early-stage Alzheimer's disease.



p-Tau181 & p-Tau217

Measuring the level of Tau protein is to diagnose Alzheimer's disease/neurodegenerative disease. Alzheimer's disease is well known to feature neurofibrillary tangles that are composed of modified tau protein which is misfolded and abnormally shaped. The accumulation of beta amyloid in the brain of a person with AD is largely completed at an earlier clinical stage, however, tau accumulation continues throughout the course of the disease. So, measuring the level of Tau protein will help to check the progress of neurodegenerative disease.



NfL (Neurofilament Light)

Neurofilament light (NfL) chain is the most abundant intermediate filament protein in myelinated subcortical axons, which plays an important role in the assembly and maintenance of axonal cytoskeleton. The level of NfL in blood can be increased in a variety of neurodegenerative diseases, such as frontotemporal dementia (FTD), vascular dementia (VaD), and Alzheimer's disease (AD).

Test Item	AMR	Sample Type	Sample Volume	Test Time
Beta Amyloid Oligomer	1.0 ~ 1,000.0 pg/mL	Plasma	20 μ L	30 min.

ABSOLVET

POC Fluorescent Immunoassay Analyzer for Companion Animals

ACCURATE & STABLE DIAGNOSTICS

Quantitative results based on FIA
Microfluidic technology with Active flow control
Built-in Heating tray

BENEFIT Duo & Combo test available

2 other tests available with 1 cartridge
2 samples' test available with 1 cartridge

LOW MAINTENANCE

QC Control with QC cartridge(Analyzer)/
Code chip(Reagent)

SPECIALIZED IN THYROID & TUMOR MARKERS

THYROID Total T4 Free T4 cTSH
TUMOR TK1 cCRP fSAA
OTHERS cCortisol cD-dimer Vitamin D PTH

ON THE SPOT Test time: 5 min.

Quick diagnosis & treatment
Rise customers' satisfaction





THYROID



Total T4

Diagnosis of Canine hypothyroidism/Feline hyperthyroidism

Total T4 is a hormone secreted from the thyroid gland that plays an important role in promoting growth and controlling basal metabolism. In dog's hypothyroidism is common, hyperthyroidism in cats. Total T4 measurements can help diagnose thyroid disease more clearly.



Free T4

Diagnosis of Canine hypothyroidism/Feline hyperthyroidism

Free T4 is a hormone secreted from the thyroid gland that plays an important role in promoting growth and controlling basal metabolism. In dog's hypothyroidism is common, hyperthyroidism in cats. Free T4 measurements that show direct secretion without the effects of globulin can help diagnose thyroid disease more clearly.



cTSH

Diagnosis of Canine hypothyroidism

TSH (also known as Thyroid-Stimulating Hormone) is a peptide hormone synthesized and secreted by thyrotrope cells in the anterior pituitary gland which regulates the endocrine function of the thyroid gland. TSH stimulates the thyroid gland to secrete the hormones thyroxine (T4) and triiodothyronine (T3).

Test Item	AMR	Sample Type	Sample Volume	Test Time
Total T4	0.50 ~ 6.00 µg/dL	Serum	50 µL	5 min.
Free T4	0.50 ~ 5.00 ng/dL	Serum	50 µL	5 min.
cTSH	0.20 ~ 5.00 ng/mL	Serum	50 µL	5 min.



TUMOR



cCRP

Diagnosis of systemic inflammation due to dog infection, tissue damage, tumors, and trauma

CRP is a highly sensitive biomarker for various inflammatory diseases such as heart, kidney, autoimmune diseases. It helps diagnose systemic inflammation caused by infections, tissue damage, tumors, and trauma in dogs.



fSAA

Diagnosis of systemic inflammation and infection in cats

SAA (also known as Serum Amyloid A) is a major feline acute phase proteins that is produced in the liver in response to inflammatory cytokines. When systemic inflammation or infection is present, the SAA concentration in the blood will increase and reach the peak within 4-6 hours. Continuous detection of SAA is useful for diagnosing and monitoring systemic inflammation and infection in cats.



TK1, thymidine kinase type1

Diagnosis of cancer or tumor

TK1 is a key enzyme for DNA synthesis and responsible for the production of thymidine during cell division. So, the level of TK1 rises when abnormal cell division and proliferation, a hallmark of cancer. Measuring the level of TK1 help diagnose cancer or tumors like lymphoma in companion animals.

Test Item	AMR	Sample Type	Sample Volume	Test Time
cCRP	5.00 ~ 200.00 µg/mL	Serum or Plasma	5 µL	5 min.
fSAA	5.00 ~ 200.00 µg/mL	Serum or Plasma	10 µL	5 min.

OTHERS



cCortisol

Diagnosis of Canine Hypoadrenocorticism/Hyperadrenocorticism

Cortisol is one of the adrenal cortical hormones secreted by adrenal glands and is a hormone that plays an important role in maintaining biologically, promoting glycogenesis, regulating lipid metabolism, and anti-inflammatory behavior. Together with ACTH stimulation and LDDS tests, it helps to more clearly diagnose canine Hypoadrenocorticism/Hyperadrenocorticism.



cD-dimer

Diagnosis of Canine systemic thrombosis

D-dimer is an indicator of intravascular fibrin formation and plasmin-mediated fibrinolysis. Measurement of plasma D-dimer concentration is useful to aid in the diagnosis of systemic thrombosis, including pulmonary thromboembolism (PTE) and disseminated intravascular coagulation (DIC).



PTH

Diagnosis of Hypo/Hypercalcemia

PTH is a hormone secreted by parathyroid regulating the level of calcium in the blood. Measuring the level of Parathyroid hormone(PTH) is able to help identify disorders that cause increased or decreased levels of calcium in the blood.



Vitamin D

Diagnosis of Vitamin D sufficiency

Measuring the level of Vitamin D is able to be used routinely for screening or monitoring of dogs and cats for the Vitamin D sufficiency. Vitamin D insufficiency is related to a wide range of diseases like inflammation, infection, kidney disease, and so on.

Test Item	AMR	Sample Type	Sample Volume	Test Time
cCortisol	0.50 ~ 25.00 µg/dL	Serum	50 µL	5 min.

