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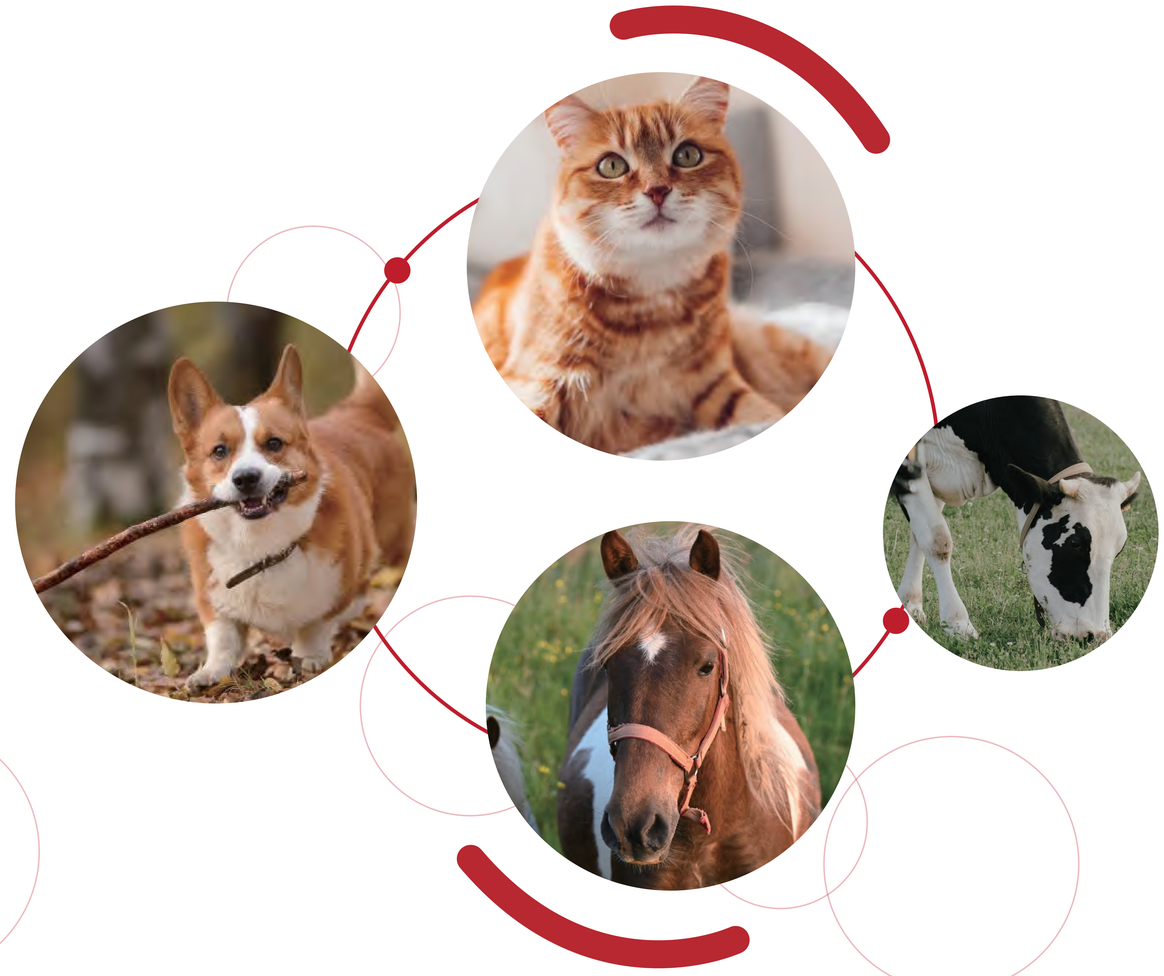
Healvet



Veterinary Immunofluorescence Quantitative Analyzer

HV-FIA 3000

Veterinary Immunofluorescence Quantitative Analyzer HV-FIA 3000

System: Android

Software Update: Online/Offline

Performance: High sensitivity

Size: 210*240mm, 2.5kg

Language: 10+ languages

Information Reading: ID card/Online

7-inch Touchscreen: Ultra-sensitive, dustproof, waterproof

Information Transmission: Supports bidirectional protocol transmission

Print: Built-in thermal printer / Wireless A4 printing

Reagent kit

Test Items
60+

4-30 °C
Room temperature

24 months
Shelf life 24 months
(Except Progesterone 18 months)

3-15 mins
Test time

10 / 75μL
Sample volume

75μL
Mixture volume

Test for Canine

Product Category	Product abbr.	Sample type	Sample size	Reaction time
Inflammation	cCRP	Serum,plasma or whole blood	10μL	3min
Cardiac Marker	cNT-proBNP	Serum,plasma	75μL	15min
Cardiac Marker	ccTnI	Serum,plasma	75μL	15min
Cardiac Marker	cNT-proBNP & ccTnI	Serum,plasma	75μL	15min
Hormone	cProg	Serum,plasma	75μL	15min
Hormone	Cortisol	Serum,plasma	75μL	15min
Hormone	TSH	Serum,plasma	75μL	15min
Hormone	T4	Serum,plasma	75μL	15min
Hormone	C-RLN	Serum,plasma	75μL	15min
Diabetes	cHbA1c	Whole blood	10μL	5min
Pancreatitis	cPL	Serum,plasma	75μL	15min
Thrombus Function	D-dimer	Plasma or whole blood	Plasma：10μL whole blood：15μL	5min
Renal Function	cCys C	Serum,plasma	10μL	10min
Renal Function	SDMA	Serum,plasma	75μL	15min
Vaccine Check	CDV/CPV/ICH Ab	Serum,plasma	75μL	10min
Vaccine Check	CPIV Ab	Serum,plasma	10μL	10min
Vaccine Check	RV Ab	Serum,plasma	10μL	10min
Vaccine Check	Lepto	Serum,plasma	10μL	10min
Tick Disease	EHR Ab	Serum,plasma	10μL	10min
Tick Disease	ANA Ab	Serum,plasma	10μL	10min
Tick Disease	LYM Ab	Serum,plasma	10μL	10min
Tick Disease	Babesia Ab	Serum,plasma	10μL	10min
Tick Disease	CHW Ag	Serum,plasma	10μL	10min
Tick Disease	Toxo	Serum,plasma	75μL	10min
Tumor Marker	CPSE	Serum,plasma	75μL	15min
Tumor Marker	cAFP	Serum,plasma	10μL	15min
Gastric Function	HP Ag	Faeces	—	10min
Infections	CPV Ag	Faeces	—	10min
Infections	CDV Ag	Eye, nose and mouth secretions	—	10min
Infections	CCV Ag	Faeces	—	10min
Infections	CPV/CCV	Faeces	—	10min
Infections	Giardia	Faeces	—	10min
Infections	MP Ag	Eye, nose and mouth secretions	—	10min
Infections	Rotavirus	Faeces	—	10min
Infections	CP Ag	Eye, nose and mouth secretions	—	10min

Test for Canine

Product Category	Product abbr.	Sample type	Sample size	Reaction time
Bone Metabolism	$25(OH)D_3$	serum, plasma	10μL	15min
Liver Function	CG	serum, plasma	75μL	10min

Test for Feline

Product Category	Product abbr.	Sample type	Sample size	Reaction time
Inflammation	fSAA	Whole blood, serum, plasma	10μL	3min
Cardiac Marker	fNT-proBNP	Serum,plasma	75μL	15min
Cardiac Marker	fcTnI	Serum,plasma	75μL	15min
Cardiac Marker	fNT-proBNP& fcTnI	Serum,plasma	75μL	15min
Hormone	Cortisol	Serum,plasma	75μL	15min
Hormone	Feline T4	Serum,plasma	75μL	15min
Hormone	TSH	Serum,plasma	75μL	15min
Diabetes	fHbA1c	Whole blood	10μL	5min
Pancreatitis	fPL	Serum,plasma	75μL	15min
Thrombus Function	D-dimer	Plasma or whole blood	Plasma：10μL whole blood：15μL	5min
Renal Function	fCys C	Serum,plasma	75μL	10min
Renal Function	SDMA	Serum,plasma	75μL	15min
Tick Disease	FCoV Ag	Feces	75μL	10min
Tick Disease	FIV	Feces	75μL	10min
Tick Disease	Toxo	Serum,plasma	75μL	10min
Vaccine Check	RV Ab	Serum,plasma	10μL	10min
Vaccine Check	FHV/FCAV/FPV Ab	Serum,plasma	75μL	10min
Infections	FeLV Ag	Serum,plasma	75μL	10min
Infections	FPV	Feces	—	10min
Infections	FHV Ag	Eye, nose and mouth secretions	—	10min
Infections	FCAV Ag	Eye, nose and mouth secretions	—	10min
Infections	Rotavirus	Feces	—	10min
Infections	Giardia	Feces	—	10min
Infections	MP Ag	Eye, nose and mouth secretions	—	10min
Infections	CP Ag	Eye, nose and mouth secretions	—	10min
Gastric Function	HP Ag	Feces	—	10min
Bone Metabolism	$25(OH)D_3$	serum, plasma	10μL	15min
Liver Function	CG	serum, plasma	75μL	10min

Test for Equine/Bovine

Product Category	Product abbr.	Sample type	Sample size	Reaction time
Equine	eSAA	Serum,plasma	10μL	5min
Equine	Foal IgG	Serum,plasma	10μL	10min
Equine	eProg	Serum,plasma	75μL	15min
Equine	eACTH	Serum,plasma	75μL	15min
Equine	eINS	Serum,plasma	75μL	15min
Bovine	PAG	Serum	75μL	15min

SDMA

Symmetric Dimethylarginine

SDMA (symmetric dimethylarginine) is a methylated derivative of arginine produced during protein metabolism. As it is almost exclusively cleared by the kidneys, SDMA serves as a highly specific biomarker for assessing renal function in dogs and cats, offering a more direct reflection of glomerular filtration rate (GFR) than creatinine.

Clinical Symptoms

- **Early Symptoms**
  Increased thirst (Polydipsia)
  Increased urination (Polyuria)
  Decreased appetite (Anorexia)
  Lethargy
- **Advanced Symptoms**
  Weight loss
  Vomiting and nausea
  Dehydration
  Bad breath (Uremic halitosis)
  Mouth ulcers
  Weakness or difficulty walking
  Poor coat condition
  High blood pressure (Hypertension)
- **Severe Symptoms**
  Seizures or tremors
  Coma
  Death

Sample type
serum, plasma

Testing time
15 mins

Sample volume
75μL

cCRP

Canine C-Reactive Protein

CRP, an acute-phase protein in canine serum, increases within 4–6 hours after inflammation or trauma, peaks at 24–48 hours, and returns to normal after recovery. It is useful for diagnosing acute conditions, monitoring treatment or surgical recovery, and detecting disease recurrence.

Clinical Application

- **Suspected Inflammation**
  To confirm its presence and assess severity.
- **Postoperative Monitoring**
  To evaluate recovery and identify complications.
- **Antibiotic Management**
  To guide the decision to initiate or discontinue antibiotic use.
- **Physical Examination**
  To screen for underlying occult diseases.
- **Condition Monitoring**
  To judge therapeutic efficacy and adjust treatment plans.

Sample type
Serum,plasma or whole blood

Testing time
3 mins

Sample volume
10μL

fSAA

Feline Serum Amyloid A

In cats, Serum Amyloid A (SAA) is a major acute-phase reactant secreted by the liver. Its plasma concentration, bound to HDL, rises dramatically during inflammation, making it useful for both disease detection and prognosis, including in conditions like diabetes and hyperthyroidism.

Clinical Application

- **Diagnosis of Suspected Inflammation**
  To confirm the presence and assess the severity of inflammation.
- **Postoperative Monitoring**
  To evaluate patient recovery and detect potential complications.
- **Antibiotic Management**
  To provide objective data for initiating or discontinuing antibiotic therapy.
- **Routine Health Screening**
  To aid in the early identification of underlying occult diseases.
- **Treatment Monitoring**
  To evaluate therapeutic response and guide timely treatment adjustments.

Sample type
Serum,plasma or whole blood

Testing time
3 mins

Sample volume
10μL

cNT-ProBNP & fNT-ProBNP

N-Terminal prototype Brain Natriuretic Peptide

NT-proBNP is a ventricular-derived biomarker released in response to increased pressure. It is used to evaluate cardiac function by aiding in the early detection, diagnosis, and classification of heart failure, distinguishing cardiac from non-cardiac dyspnea, and guiding treatment and prognosis.

Clinical Application

- Hypertrophic cardiomyopathy (HCM)
- Valvular Inadequacy
- Dyspnea
- Physical examination for elderly dogs and cats
- Dilated cardiomyopathy (DCM)
- Congestive Heart Failure (CHF)
- Hypertension
- Hyperthyroidism

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

ccTnI & fcTnI

Cardiac Troponin-I

As a specific marker of myocardial cell injury, Troponin is vital for diagnosing acute myocardial infarction. Its elevation reflects damage from various cardiac and systemic causes, with concentration generally indicating injury severity, though it may also be elevated in renal failure.

Clinical Application

- Suspected Myocardial Infraction
- Intensive Care Unit (ICU)
- Toxic Cardiomyopathy
- Myocarditis
- Congestive Heart Failure (CHF)

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

T4 & TSH

Thyroxine &Thyroid Stimulating Hormone

Thyroxine (T4) regulates key bodily functions—including growth, metabolism, energy production, and nervous system activity. Imbalances in T4 secretion are central to canine hypothyroidism ("fat dogs") and feline hyperthyroidism ("thin cats").

Clinical Application

- Diagnosis: T4 and TSH as first-line tests for canine hypothyroidism (>80% efficacy); TSH/fT4 for feline hyperthyroidism (98% efficacy).
- Monitoring & Prognosis: Tracking the progression and management of thyroid secretory diseases.
- Wellness Screening: Recommended for senior dogs and cats (over 4-6 years old).
- Preanesthetic Evaluation: Assessing metabolic status prior to surgery.

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

cPL/fPL

Pancreas-specific Lipase

Acute pancreatitis is a serious condition often challenging to diagnose due to non-specific symptoms. The measurement of pancreatic lipase provides high specificity and sensitivity for pancreatitis, with minimal interference from other drugs or digestive disorders, making it invaluable for early diagnosis and monitoring treatment response.

Clinical Application

Early Diagnosis:
- Detects specific enzymes for acute pancreatitis (presenting with abdominal pain, anorexia, vomiting).

Therapeutic Guidance:
- Informs management (fluid therapy, analgesics, antiemetics).

Secondary Assessment:
- Evaluates pancreatic involvement in related digestive diseases (e.g., cholecystitis, enteritis).

Prognostic Evaluation:
- Aids outcome prediction when combined with CRP(canine) or fSAA(feline) measurement.

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

cProg

Canine Progesterone

Canine progesterone, secreted by the ovaries' corpus luteum after ovulation, critically prepares the endometrium for pregnancy and is essential for its maintenance.

Clinical Application

- Predict optimal breeding time
- predict the parturition time

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

C-RLN

Canine Relaxin

Canine Relaxin, a hormone produced by the placenta after embryo implantation, is detectable in blood as early as 22-27 days post-breeding. Its levels remain elevated throughout pregnancy and decline rapidly after parturition. The test utilizes fluorescent quantitative immunochromatography to rapidly measure Relaxin concentrations in canine serum and plasma.

Clinical Significance

- Widely used in the diagnosis of early pregnancy in dogs.
- Each fetus produces relaxin, and it is ultimately possible to estimate the number of fetuses by estimating relaxin content.

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

Cortisol

Canine/Feline Cortisol

Cortisol, a hormone produced by the adrenal glands during stress, regulates blood pressure, blood sugar, and immune function. Its dysfunction—high levels causing Cushing's syndrome and low levels linked to Addison's syndrome—is diagnosed through clinical signs, biochemical tests (e.g., ACTH stimulation), and imaging.

Clinical Application

- Health screening for senior dogs and cats (over 4-6 years old)
- Diagnosis of Cushing's syndrome
- Diagnosis of Addison's syndrome
- Therapeutic monitoring for Cushing's and Addison's syndromes

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

cHbA1c/fHbA1c

Glycated hemoglobin

Glycated hemoglobin (HbA1c) is a stable product of non-enzymatic glycosylation, formed between blood glucose and hemoglobin. Its level reflects the average blood glucose concentration over the preceding 90 days, independent of recent intake, insulin use, or time of blood draw, making it an ideal indicator for diagnosing diabetes and monitoring long-term glycemic control in dogs and cats.

Clinical Application

- **Screening & Early Detection**
  Identifies prediabetes and is recommended for middle-aged and senior wellness exams.
- **Treatment Monitoring**
  Evaluates the efficacy of ongoing diabetes management.
- **Diagnosis**
  Confirms a diagnosis of diabetes mellitus.
- **Targeted Screening**
  Focuses on high-risk groups, including obese pets, intact female dogs, and neutered male cats.

Sample type
whole blood

Testing time
5 mins

Sample volume
10μL

Giardia Ag

Giardia is a zoonotic protozoan parasite and a common cause of intestinal infection. Primarily inhabiting the small intestine, it poses a significant health risk to dogs, cats, and humans.

Clinical Symptoms

In Dogs:

- Adult Dogs: Often asymptomatic or show transient signs like intermittent diarrhea, weight loss, and lethargy.
- Puppies: High susceptibility (up to 100% in litters) with severe symptoms, including mucoid or bloody diarrhea, dehydration, and rapid decline.

In Cats:

- Kittens: Common signs include abdominal distension, yellow mushy stools, and poor coat condition.
- Adult Cats: Typically asymptomatic carriers that shed the parasite, posing an infection risk through fecal contamination.

Sample type
Feces

Testing time
10 mins

Sample volume
Sufficient

CHW Ag

Canine Heartworm Antigen

Canine heartworm: a severe, potentially fatal parasitic disease (parasites in the heart and pulmonary arteries). Transmitted by infected mosquito bites, larvae mature into adults, damaging the heart, lungs and other organs, leading to severe complications.

Clinical Symptoms

- **Early Stage (Asymptomatic Phase)**
  Mild dry cough, reduced exercise tolerance (easier winded during walks), slight lethargy
- **Middle Stage (Symptomatic Phase)**
  Worse cough (especially at night), shortness of breath, poor appetite, weight loss, dull rough coat, mild abdominal distension (some dogs)
- **Late Stage (Critical Phase)**
  Severe wheezing, pleural/peritoneal effusion (noticeably swollen abdomen), limb edema, heart failure, pale mucous membranes, sudden death

Sample type
Serum,plasma

Testing time
10 mins

Sample volume
10μL

Vaccine Check

Vaccination is a cornerstone of infectious disease prevention in pets, reducing susceptibility and enhancing specific immunity. Its success depends on external factors (e.g., vaccine quality, protocol) and the animal's immune responsiveness. Regular antibody testing is therefore recommended to ensure adequate protection while avoiding over-vaccination, thereby maintaining pet health.

Parameters

CDV/CPV/ICH Ab
FHV/FCAV/FPV Ab
RV Ab
Lepto Ab
CPIV Ab

Clinical Application

- Primary immunization (pre- and post-vaccination)
- Diagnosis and treatment of disease
- Surgical periods
- Routine physical examinations

Infections

This immunofluorescence-based in vitro diagnostic product enables quantitative detection of viral content in canine and feline samples. It supports epidemiological surveillance and diagnosis of infectious diseases, providing accurate data for timely intervention and treatment.

Parameters

CDV Ag
CPV Ag
CCV Ag
CPV/CCV Ag
Rotavirus Ag
FPV Ag
FCoV Ag
FHV Ag
FCAV Ag
FeLV Ag
FIV Ab
FCoV Ab
Toxo Ab

Specification

- Read the results within 10 minutes
- Reading the RAPID test results visually can lead to ambiguous interpretation, especially for samples that have low levels of analyte. With Healvet analyzer, a more precise and objective result is produced for better diagnosis

MP Ag

Mycoplasma Ag

Mycoplasmas are cell wall-deficient prokaryotes, ubiquitous on the mucous membranes of healthy dogs and cats. Lacking a cell wall, they are intrinsically resistant to certain antibiotics and can invade host cells. Typically existing as asymptomatic commensals, they may cause clinical disease during immunosuppression or stress. Latent carriage rates in healthy canine and feline populations are estimated to exceed 65%, complicating clinical assessment of their impact.

Clinical Significance

- **Mycoplasma feline**

  Respiratory Symptoms: Commonly associated with upper respiratory tract infections (URI), presenting as sneezing, conjunctivitis, lacrimation, and occasionally pneumonia. While clinical signs may resolve within 2-4 weeks, co-infection with other pathogens (e.g., feline herpesvirus or calicivirus) is common and can complicate the course of the disease.

  Ocular Symptoms: Conjunctivitis is a prominent feature, often characterized by significant ocular and nasal discharge.

- **Mycoplasma Canine**

  Respiratory Symptoms: Commonly presents as part of Canine Infectious Respiratory Disease (CIRD), with signs including coughing, nasal discharge, and dyspnea. Infected dogs often exhibit increased ocular and nasal discharge.

  Potential Complications: The infection can increase susceptibility to secondary pathogens, particularly in immunocompromised dogs. Certain species, such as Mycoplasma cynos, are also associated with reproductive tract disease.

Sample type
Eye, nose and mouth secretions

Testing time
10 mins

Sample volume
Sufficient

CP Ag

Chlamydia Ag

Chlamydia is a zoonotic, obligate intracellular bacterium that poses a significant endemic threat to both animals and humans. In dogs and cats, it is ingested by host phagocytes and cannot replicate outside a host cell. Prevalent in multi-cat environments such as shelters and catteries, it primarily causes conjunctivitis in cats and can also lead to upper respiratory infections.

Clinical Significance

- **Chlamydia feline**

  Onset & Symptoms: Following an incubation period of 3-10 days, primary symptoms include conjunctivitis, rhinitis, and potential pneumonia. Ocular discharge typically progresses from serous to mucopurulent, accompanied by sneezing and nasal discharge.

  Complications & Severity: Infection in pregnant cats can lead to abortion. Immunosuppression from the disease may also predispose cats to secondary bacterial infections.

- **Chlamydia Canine**

  Symptom Profile: Infection with Chlamydia psittaci in dogs produces a clinical presentation resembling canine distemper. Key manifestations include conjunctivitis, pneumonia, enteritis, polyarthritis, encephalomyelitis, and abortion.

  Diagnostic Utility: This symptom profile serves as a critical reference for the differential diagnosis of canine distemper in clinical practice.

Sample type	Testing time	Sample volume
Eye, nose and mouth secretions	10 mins	Sufficient

CPSE

Canine prostate-specific esterase

Canine Prostatic-Specific Esterase (CPSE), an androgen-dependent secretory protein constituting over 90% of prostate fluid protein, is present in both seminal plasma and blood. Its serum concentration rises with prostatic cell proliferation, demonstrating high specificity as an early biomarker for diagnosing benign prostatic hyperplasia (BPH) in dogs.

Clinical Symptoms

- Screening for early benign prostatic hyperplasia (BPH) in dogs can assist in the diagnosis of canine prostate disease.
- Physical examination of breeding male dogs and screening of healthy dogs.
- Monitoring the therapeutic effect of dogs with confirmed disease.
- Pet with frequent urination, urgent urination, hematuria, urinary retention and other symptoms, resulting in urinary system infection, prostate function test was performed to evaluate pet prostate function and reproductive health.

Sample type	Testing time	Sample volume
Serum,plasma	15 mins	75μL

cAFP

Canine alpha-fetoprotein

Alpha-fetoprotein (AFP) is a protein produced by the liver during periods of rapid cell growth and division. While elevated in unborn puppies, AFP levels drop to very low concentrations in healthy, non-pregnant dogs after birth. The AFP test measures this protein in the blood and serves as a tumor marker to aid in diagnosing certain cancers and monitoring treatment response.

Clinical Symptoms

- Auxiliary diagnosis of liver cancer in dogs
- Screening for acute and chronic hepatitis or cirrhosis in dogs
- Monitoring the curative effect of surgical treatment of liver cancer, evaluating the therapeutic effect, and checking whether the cancer recurred
- Physical examination of elderly dogs

Sample type	Testing time	Sample volume
Serum,plasma	15 mins	10μL

D-Dimer

D-dimer is a specific fibrin degradation product whose elevated plasma level indicates active thrombosis and fibrinolysis. It serves as a sensitive diagnostic marker for disseminated intravascular coagulation (DIC), systemic thrombosis (e.g., pulmonary embolism), and hypercoagulable states associated with conditions like tumors and heart disease.

Clinical Application

- Diagnosis of arterial thrombosis
- Pulmonary Embolism (PE)
- Deep Venous Thrombosis (DVT)
- Severe inflammation
- Postoperative & preoperative examination
- Disseminated Intravascular Coagulation (DIC)

Sample type
plasma or whole blood

Testing time
5 mins

Sample volume
plasma： 10μL
whole blood： 15μL

cCys-C & fCys-C

Cystatin C

Cystatin C, a cysteine protease inhibitor produced at a constant rate by nucleated cells, is an ideal endogenous marker whose blood concentration is determined primarily by the glomerular filtration rate (GFR). It is freely filtered and metabolized by the kidneys, making it a more sensitive indicator of renal function than creatinine.

Clinical Application

- Screening for early canine & feline chronic kidney disease
- Check renal function before anesthesia
- Clinical diagnosis of renal disease
- Assessment of renal failure in combination with blood biochemistry

Sample type
Serum,plasma

Testing time
10 mins

Sample volume
10μL

HP Ag

Helicobacter Pylori Ag

Helicobacter pylori infection of the gastric mucosa is a primary etiological factor in gastritis, peptic ulcers, adenocarcinoma, and lymphoproliferative disorders. Its pathogenicity is mediated through the production of toxins and enzymes that disrupt the mucosal barrier, incite local inflammation and immune responses, and promote hypersecretion of gastrin, ultimately leading to disease.

Clinical Symptoms

- **Gastrointestinal symptoms**
  Indigestion, long-term loss of appetite, acid reflux, vomiting, etc.
- **Oral symptoms**
  Bad breath, periodontitis, thickened tongue coating, dry oral mucosa
- **Other**
  Tired easily, prone to lying down, not active, etc

Sample type
Feces

Testing time
10 mins

Sample volume
Sufficient

EHR Ab、LYM Ab、ANA Ab

Ehrlichia Ab, Lyme Ab, Anaplamsa Ab

Canine tick-borne disease is a common and serious parasitic condition, with a high incidence in summer. Ticks transmit various pathogens—including viruses, bacteria, spirochetes, and protozoa—causing emerging and re-emerging illnesses such as Lyme disease, babesiosis, anaplasmosis, and ehrlichiosis. These diseases can cause severe harm or even death in dogs and are also zoonotic.

Ehrlichiosis

Canine Ehrlichiosis, a tick-borne disease caused by the rickettsial organism Ehrlichia, is primarily transmitted by the brown dog tick, Rhipicephalus sanguineus. Prevalent in late summer and early autumn, the pathogen can be transmitted by nymphal ticks and infected dogs for at least 155 days. Moreover, ticks that overwinter can remain infectious and transmit the disease to susceptible dogs the following season.

Incubation & Progression

- The incubation period is 8-12 days.
- The disease typically progresses through three stages: acute, subclinical, and chronic.

Clinical Signs

- Common Symptoms: Periodic fever, anorexia, mucopurulent nasal discharge, weight loss, and anemia.
- Severe Cases: Vomiting, lymphadenopathy, oral erosions, limb/scrotal edema, ascites, hydrothorax, and gastroenteritis.
- Dermatological Signs: Some dogs present with sensitive erythema in the axilla and groin.

Lyme Disease

Lyme disease is a zoonotic illness caused by the spirochete Borrelia burgdorferi and transmitted through the bite of infected ticks. Clinical signs of infection can be acute and include fever, anorexia, polyarthritis with lameness, acute progressive renal failure, and neurological syndromes.

Anaplasmosis

Canine anaplasmosis is a tick-borne bacterial disease prevalent in tropical and subtropical regions, with seasonal incidence peaking in warm spring and autumn months and subsiding in colder seasons. Two primary forms affect dogs: Anaplasma phagocytophilum, which infects white blood cells and is zoonotic, transmitted by deer ticks and black-legged ticks; and Anaplasma platys, which infects platelets and is transmitted by the brown dog tick.

Clinical symptoms: The common clinical manifestations were claudication and joint pain, lethargy, loss of appetite and fever. Less common are: cough, seizures, vomiting, and diarrhea.

Sample type	Testing time	Sample volume
Serum,plasma	10 mins	10μL

Canine Babesia Ab

Babesia canis and Babesia gibsoni are tick-borne protozoan parasites that infect canine red blood cells, leading to anemia, jaundice, and splenomegaly. Transmission occurs primarily through ticks (e.g., Rhipicephalus and Haemaphysalis), but also via direct contact, blood transfusion, or transplacentally. This globally distributed disease is most prevalent in spring and summer in tick-endemic areas.

Clinical Symptoms

Systemic Signs:
Infected dogs may develop a high fever, lethargy, anorexia, and difficulty breathing.

Gastrointestinal Signs:
Vomiting and diarrhea are commonly observed.

Hemolytic Signs:
The destruction of red blood cells leads to hemolytic anemia, presenting as pale mucous membranes, jaundice (icterus), and red-orange urine (bilirubinuria).

Sample type	Testing time	Sample volume
Serum,plasma	10 mins	10μL

eINS
Equine Insulin

The Equine Insulin Test Kit quantifies insulin levels to identify insulin dysregulation, assess Equine Metabolic Syndrome (EMS), and evaluate laminitis risk. It is also recommended for horses suspected of having Pituitary Pars Intermedia Dysfunction (PPID) to gauge their risk of laminitis.

Clinical Application

- Obesity,especially“cresty neck” or regional fat deposits
- Recurrent or unexplained laminitis
- Suspected EMS or PPID
- Routine screening for high-risk horses
- Monitoring response to insulin therapy

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

Foal IgG

Neonatal foals are initially agammaglobulinemic, relying on colostral intake for immunoglobulin G (IgG). Failure to absorb sufficient IgG within the first 24 hours results in low levels and high susceptibility to infection. The foal IgG test provides rapid, accurate results to promptly identify deficiency and initiate critical treatment.

Clinical Application

- Assessing immune levels of neonatal foals
- Evaluate the quality of the mare's colostrum after foaling
- Monitor the immune level serially

Sample type
Serum,plasma

Testing time
10 mins

Sample volume
10μL

eProg
Equine Progesterone

Progesterone is essential for maintaining pregnancy in mares until around day 120, when the placenta assumes this role. In non-pregnant mares, it aids in monitoring estrous cycles. The equine progesterone test kit allows for the quantitative, in vitro measurement of progesterone levels in serum or plasma, delivering fast and accurate results.

Clinical Application

- To predict estrus cycles in mares
- To predict progesterone levels in mares
- To track heat cycles
- To monitor and manage behavior

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

eSAA

Equine Serum Amyloid A

The Equine SAA Test Kit is designed for the quantitative in vitro determination of Serum Amyloid A (SAA) in equine serum and plasma. While SAA is present at minimal levels in healthy horses, its concentration rises rapidly in response to pathological conditions such as infection, tissue injury, or inflammation.

Clinical Application

- Monitoring post-operative effects and recovery after surgery
- Measuring the inflammation response to treatment
- Infection
- Gastrointestinal disease
- Reproductive disease
- Joint disease

Specific Clinical Application

SAA concentration increases in response to a number of clinical conditions in horses, such as sepsi,viral infections, arthritis, gastrointestinal and reproductive disease. Its measurement is also useful for the ongoing monitoring of treatment response.

Sample type
Serum,plasma

Testing time
5 mins

Sample volume
10μL

eACTH

Equine Adrenocorticotropic Hormone

Equine Adrenocorticotropic Hormone (eACTH), secreted by the anterior pituitary, stimulates cortisol production from the adrenal cortex to regulate stress response, metabolism, and immune function.

Clinical Application

- Pituitary Dysfunction Diagnosis
- Determine diagnostic thresholds for different seasons
- Dynamic Function Test Assistance
- Diagnose congenital adrenal hyperplasia
- Ectopic ACTH Syndrome Diagnose and treat ectopic ACTH syndrome

Sample type
Serum,plasma

Testing time
15 mins

Sample volume
75μL

PAG

Bovine Pregnancy-associated glycoprotein

Pregnancy-associated glycoproteins (PAGs) play potential roles in embryo attachment, placental development, pregnancy maintenance, embryo survival, proteolytic activity, and immunomodulation. They serve as established biomarkers for early pregnancy diagnosis and embryonic loss, as well as indicators for assessing fetal viability and monitoring placental health.

Clinical Application

- Detect eary pregnancy 28 days after breeding.
- Find empty cows early.
- Improve cost efficiency.
- Monitor the health status of pregnant cows.
- Shorten the calving interval.

Sample type
Serum

Testing time
15 mins

Sample volume
75μL

$25(OH)D_3$

25-hydroxyvitamin D_3

The concentration of 25-hydroxyvitamin D3 (25(OH)D3) is the most reliable indicator for assessing vitamin D levels and nutritional status in dogs and cats. Vitamin D deficiency is associated with many diseases, such as rickets in young animals, osteomalacia in adults, cardiovascular disease, tumors, and chronic kidney disease.

Clinical Application

- **1. Rickets:** Commonly seen in young dogs and cats, it manifests as stunted growth, swollen joints in the limbs, and bowed limbs when standing or walking, forming "X" or "O" shaped legs, often accompanied by lameness and reduced activity.
- **2. Osteomalacia:** Can occur in both dogs and cats, mainly characterized by increased bone fragility, with fractures easily caused by minor external forces; significant skeletal deformities, and abnormal curvature of the spine, such as lumbar lordosis or kyphosis, often resulting in decreased jumping ability and increased pain sensitivity.

Sample type	Testing time	Sample volume
Serum,plasma	15 mins	10μL

CG

Cholyglycine

Cholyglycine is an important component of bile acids, mainly involved in fat digestion and absorption. Under normal circumstances, it is almost completely taken up by liver cells and excreted into bile. When cirrhosis, hepatitis, or liver cancer occurs, liver cells are damaged, reducing their ability to take up CG, leading to increased CG levels in the blood. When bile stasis occurs, the liver's excretion of bile acids is impaired, and the CG content returning to the bloodstream increases, also resulting in elevated blood CG levels.

Clinical Application

- **Liver Damage Indicator:** CG levels elevate in liver diseases like hepatitis, cirrhosis, andhepatic failure, providing an early sign of liver dysfunction.
- **Bile Stasis Identification:** Conditions like bile duct obstruction and cholangitis cause asignificant increase in CG levels.
- **Early & Accurate Indicator:** CG elevate sooner than ALT/AST in early damage, accuratelyreflecting hepatobiliary function severity.
- **Breeding Health Assurance:** Breeding increases liver stress, which may raise CG levels andharm the fetus.

Sample type	Testing time	Sample volume
Serum,plasma	10 mins	75μL