LABOMED INC.

VET-CHEM100
Automated Veterinary Biochemistry Analyzer

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VET-CHEM100 Automated Veterinary Biochemistry Analyzer realizes the miniaturization and automation of the analyzer by microfluidic technology. It has a built in intellegent quality control system, test results are accurate and reliable, the analyzer is easy to operate and take up a little space. It is an ideal diagnostic tool to help veterinarians assess the health of animals and it has become the professional choice of thousands of veterinary hospitals and clinics.
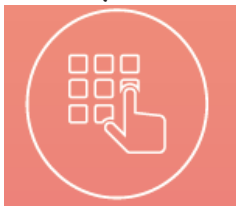
FEATURES

1. **Small and Portable.**

   Small size, weight only 4kg.
   Small footprint and can be carried anywhere.

2. **Easy to use**

   Only need to add samples, it's easy to operate.
   No need to add diluent manually.

3. **Small sample volume**

   The sample volume is only 100μl.
   Easy to do test for small animals and exotic animals.

4. **One analyzer for multiple uses**

   Covers biochemistry, electrolyte, coagulation, feline and canine inflammation detection (c-CRP, f-SAA).

5. **Consumable advantages**

   Freeze-dried reagents with 15-month shelf-life.
   Original disc microfluidic technology to avoid cross-contamination.
   Autonomous ultrasonic weldin, the quality is more guaranteed.

6. Lifetime maintenance

Imported key parts, no internal pumps, valves and other vulnerable parts.
25-month warranty, lifelong free maintenance.

SPECIFICATION

Sample Volume	90-120μl
Sample Type	Anti-coagulated whole blood, serum, plasma
Bar Code	Two-dimensional bar code
Storage	MAX 500.000 results
Temparature	37±0.3°C
Resolution	0.001 Abs
Testing Method	End point, kinetic, fixed time and turbidimetry
Operational Environment	Temperature: 10-30°C, Humidity: ≤ 85%
Light Source	12V/20W, halogen tungsten lamp's life span is over 2500 hours
Power	AC 100-240V, 50/60Hz
Weight	4Kg
Testing Principle	Absorption spectroscopy, transmission turbidimentry
Printer	Built-in thermal printer
QC & Calibrate	Real time full-auto finish
Absorbance	0-3.0Abs
Display	Android 7.0 inch 800*480, multi-point capacitive touch screen
Connectors	2 USB ports
Language	English, Italian, Portuguese, Russian, Spanish, Deutsch, French
Rated Power	100VA

EASY 3-STEPS OPERATION

01 Insert Sample(100μl blood)
Whole blood sample do not require pre-treatment.
A full test is available with only 100μl of whole blood, serum or plasma.

02 Insert Rotor(12 minutes to result)
Key moving parts are original and sourced from US manufacturer. All fluids are self-contained within the rotor, eliminating the need for internal pumps, valves and other vulnerable parts.

03 Read Result (immediately)
Analyzer quality control and calibration are automatically carried out in real time during the analysis process. Use the photoelectric colorimetric principle to eliminate random error and cross contamination.

VETERINARY ROTOR PROFILE

23 Comprehensive Plus Test

Characteristic

This rotor with the most comprehensive parameters cover multiple biochemical groups such as liver, kidney, pancreas, myocardium, ion, protein, and metabolism, and can help veterinarians to diagnose diseases in all aspects. It is often used for comprehensive test of disease and health. It is a cost-effective rotor for veterinary hospitals and pet owners.

Note: Parameters with * are calculated values

Parameters

ALB	ALP	ALT	AMY	AST	Ca	CK	Crea	GLU	GGT	LDH	LPS
PHOS	TBA	TB	TC	tCO_2	TG	TP	BUN	A/G*	B/C*	GLOB*	

13 Comprehensive Diagnostic Parameters

Characteristic

The combination involves multiple parameters, such as liver function, kidney function, blood sugar, K^+ and Na^+. Therefore, it's meaningful for nephropathy monitoring.It's very helpful for the sterilization of felines and canines, and it also can be used for simple screening of emergency diseases and health check. Among them, the ALP can better assist veterinarians in the judgment of pancreatic diseases.

Note: Parameters with * are calculated values

Parameters

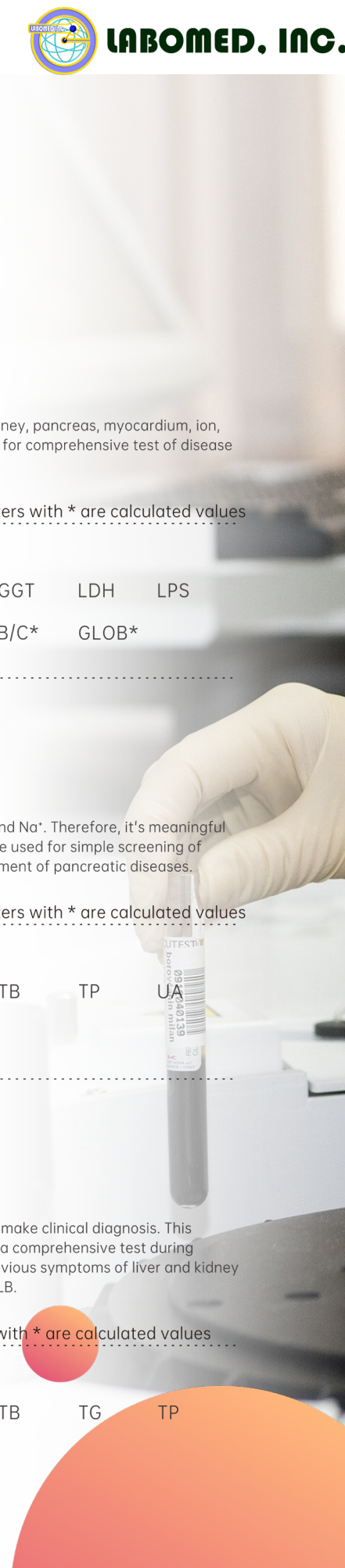| ALB	ALP	ALT	AMY	CHE	K^+	Na^+	Crea	GLU	TB	TP	UA
BUN	A/G*	B/C*	GLOB*								

13 Health Check Parameters

Characteristic

It's often used for disease screening, health check and sterilization check, which can help veterinarians make clinical diagnosis. This parameters involve liver function, kidney function, myocardium and blood lipids. It's also often used for a comprehensive test during treatment (test every 3-4 days).13 Health check parameters are suitable for felines and canines with obvious symptoms of liver and kidney damage. It can be preliminarily judged high or low blood calcium through combined with total Ca and ALB.

Note: Parameters with * are calculated values

Parameters

ALB	ALT	AMY	AST	GLU	CK	Ca	Crea	BUN	TB	TG	TP
PHOS	A/G*	B/C*	GLOB*								

8 Feline Inflammation

Characteristic

Note: Parameters with * are calculated values

f-SAA (Feline Serum Amyloid) is an acute phase protein, which is mainly produced by the liver. It's secreted during the acute phase of inflammation and the concentration of SAA will increase more during onset and recurrence, especially in the early damage of inflammation and tissue. In the early stage of feline suffering from infectious diseases, SAA has important significance in the identification of bacterial and viral infections, and is an important inflammatory index and prognostic marker for felines. At the same time, the rotor contains pancreas, kidney, liver and gallbladder parameters, which can comprehensively assess the felines' physical condition.

Parameters

ALB　ALP　Crea　GGT　LPS　TBA　BUN　f-SAA　B/C*

5 Canine Inflammation

Characteristic

Note: Parameters with * are calculated values

c-CRP (C-reactive protein) is the main acute-phase reactive protein in canines. It will increase in the presence of inflammation, and its much better in judging inflammation than white blood cells. Veterinary hospital is mainly used to assess the severity of systemic inflammation and monitor the effectiveness of treatment.

Parameters

AMY　Crea　LPS　BUN　c-CRP　B/C*

4 Coagulation Parameters

Characteristic

Coagulation test has a wide range applications in clinics, and it's often used to determine the blood coagulation function of animals before operation, as well as the poisoning and parvovirus test.

Parameters

PT　APTT　TT　Fib

9 Diabetes Test Parameters

Characteristic

Fructosamine can diagnose diabetes more accurately that has occurred in animals within the last 1-2 weeks, and it can also effectively rule out hyperglycemia caused by stress (especially felines). Through continuous monitoring of fructosamine (test every 7 days) canreflect the effect of insulin therapy effectively.

Parameters

ALT　AMY　AST　GLU　LPS　TC　TG　LAC　FRU

10 Primary Diagnostic

Characteristic

Note: Parameters with * are calculated values

It can check liver and kidney protein, blood sugar metabolism. It's very helpful for canines and felines, especially canines sterilization, and it can be used for simple screening of acute and severe diseases and health check. ALP is a parameter that can better assist veterinarians in judging pancreatic diseases.

Parameters

ALB   ALP   ALT   Crea   GLU   TP   BUN   A/G*   B/C*   GLOB*

9 Pre-operation Test Parameters

Characteristic

Note: Parameters with * are calculated values

It's often used to check whether the animals' physical signs are suitable for operation, and often used with the 4 coagulation parameters together, which can greatly reduce the risk of bleeding, pain and anesthesia during the operation. Transaminase is used to assess the function of anesthesia recovery, and help the veterinarians to confirm anesthetic dosage. LDH assesses myocardial indicators and prevents surgical risks such as shock during operation.

Parameters

ALP   ALT   AST   CK   Crea   GLU   LDH   TP   BUN   B/C*

8 Kidney Function Parameters

Characteristic

Note: Parameters with * are calculated values

According to the parameters to check and assess the kidney function. Through observing the clinical manifestations of animals and detecting the B/C* parameter, veterinarians can judge prerenal, renal, and postrenal azotemia correctly. Especially for felines, the incidence of kidney disease due to lack of drinking water is higher than that of other animals. Crea, Bun, Ca and PHOS are helpful for the reexamination of kidney diseases.

Parameters

ALB   Ca   Crea   GLU   PHOS   tCO$_2$ UA   BUN   B/C*

9 Liver Function Parameters

Characteristic

Note: Parameters with * are calculated values

Liver function is a required check item for routine diseases, and the veterinarians can judge the cause based on liver function parameters accurately. TBA, ALP and GGT are very important for the detection of animal liver function and cholestasis.

Parameters

ALB   ALP   ALT   AST   GGT   TBA   TB   TC   TP   A/G*   GLOB*

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9 Electrolyte Plus Parameters

Characteristic

The parameters contain PH and LAC. The PH is usually an important parameter for monitoring the normal activity of the enzyme system and it can assess the decompensated acidosis or alkalosis. The LAC can find out whether the animal has lactic acidemia, especially when the animal has multiple serious diseases, such as liver and kidney dysfunction, and shock.

Parameters

Ca Cl^- K^+ Mg Na^+ PHOS tCO_2 PH   LAC

Ammonia Test Parameters

Characteristic

The ammonia produced by the various tissues of the animal body in the process of amino acid metabolism and the ammonia produced by the decomposition of intestinal microorganisms, all can enter the blood to form blood ammonia. If the animal has weight loss, back muscle atrophy, rough hair and other symptoms. It needs to be checked for ammonia to find out if it is caused by elevated blood ammonia or kidney disease. The ammonia parameter is often used with 8 kidney function parameters.

Parameters

NH_3

7 Electrolyte Parameters

Characteristic

The rotor contains a variety of ion parameters, such as K^+ and Na^+, which can check the content of electrolytes in animals and provide a basis for supplementing electrolytes to maintain internal osmotic pressure and acid-base balance. It's an indispensable checking method for clinical treatment of severe water loss and heart failure. It is often used for ion checking before animal infusion and in infusion, and provides an important basis for veterinarians to take medicine.

Parameters

Ca Cl^- K^+ Mg Na^+ PHOS tCO_2

11 Exotic & Reptilian Animals Parameters

Characteristic

Exotic & reptilian animal parameters, the parameters contain UA, which is especially suitable for the diseases checking of birds, reptiles and rodents.

Parameters

ALB   AST   Ca   CK   GLU K^+ Na^+ PHOS   TBA   TP   UA