

Total Canine Care™



CANINE RELAXIN HORMONE (RLN)



**SERUM,
OR PLASMA**



RAPID TEST KIT (10CT.)

10 SELF-CONTAINED, READY-TO-USE TESTS

• Contents •

- **10X** Test Cassette in Foil Pouches
- **10X** Test Assay Buffer Bottles (40uL per drop)
- **10X** Mixture Tubes Only
- **10X** Mixture Tube Tips Only (40uL per drop)
- Disposable Transfer Pipettors (40uL per drop)
- Biohazard Collection Bag
- User Guide

• Complementary Items •

- 10X Syringes (25G)
- 10X Centrifuge Cups (2 mL)
- Workstation Rack (for buffers/samples/serum)
- Elastic Tourniquet
- Disposable Gloves
- Antibiotic Ointment

• Manufactured By •

Hangzhou All Test Biotech Co., Ltd
550 Yin Hai Street, Hangzhou Economic
& Technologic Development Area
Hangzhou, 310018, P.R China

• Distributed By •

MR Diagnostic Services LLC
Address: 540 E. Shady Lane
Neenah, WI 54956
Email: support@K9P4go.com
Website: www.caninep4.com

• Intended Use •

Total Canine Care™ Relaxin Test Cassette (Serum/Plasma) is a sandwich lateral flow immunochromatographic assay for the qualitative detection for canine relaxin (RLN) hormone in canines serum and plasma 26 days post fertilization for the auxiliary diagnosis of early pregnancy.

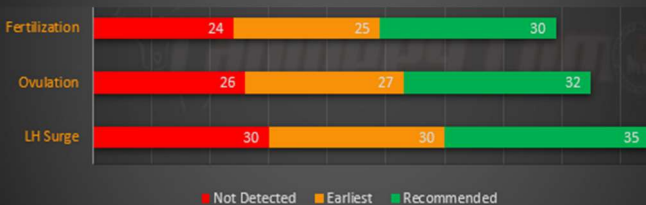
Relaxin is a peptide hormone synthesized and secreted by corpus luteum and placenta during pregnancy. The secretion of relaxin in pregnancy increased gradually with the increase of gestation and decreased rapidly to virtually undetectable after partum, spontaneous abortion, or in non-pregnant in canines.

The serum relaxin level of pregnant dogs at 28 days is significantly higher than that of not pregnant dogs, peaking at 35 days, so relaxin can be used as an early pregnancy marker in dogs.

• Test Principle •

The Relaxin (RLN) Rapid Test Cassette is a sandwich lateral flow immunochromatographic assay. The test cassette has a testing window. The testing window has an invisible T (test) zone and C (control) zone. When sample is applied into the sample well on the cassette, the liquid will laterally flow on the surface of the test strip. If there is enough canine relaxin hormone in the sample, a visible T line will appear in the T zone. The C line should always appear after sample is applied, indicating a valid result. By this means, the cassette can accurately indicate the presence of canine relaxin hormone in the sample.

Days to First Relaxin Test



• Index of Warning Symbols •



• Precautions •

- For animal use only. Not for use in humans. Keep out of reach of children.
- This kit is designed for in vitro veterinary use only.
- Follow warning symbol recommendations.
- Handle all specimens as if they contain infectious agents. Observe established precautions against microbiological hazards through testing and follow the standard procedures for proper disposal of specimens.
- Wear disposable gloves and eye protection when specimens are being tested.
- **DO NOT** reuse test kit components. Discard after use.
- **DO NOT** use after expiration date.
- **DO NOT** mix components from different lots and different products.
- **DO NOT** operate near heavy vibrations or on steep inclines.
- **DO NOT** operate in dusty conditions.
- **DO NOT** touch the sample deposit area of the test cassette.
- **DO NOT** dispose sharps in standard trash.

• Recommended Materials •

- **Timer.** Proper procedure times needed for testing. See individual steps.
- **Centrifuge.** For collection of serum/plasma, centrifugation is required.

• Limitation of Test •

- Serological screening test only. Not suitable for replacement of any ultrasonic (or equivalent) test. All results should be considered with other clinical information available from a veterinarian.

• Directions for Use •

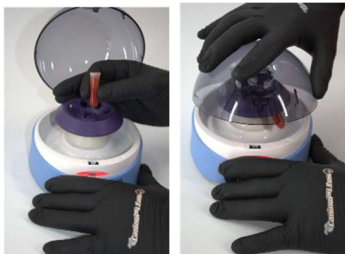
Step 1 Prior to testing, determine whether serum or plasma testing is preferred by user. See list below. Only use clear, non-hemolyzed, non-clotted specimens. For best results, perform test within 30 minutes of collection.

- **SERUM** Testing: Proceed to **Step 3a**.
- **PLASMA** Testing: Proceed to **Step 3b**.

Step 2 Allow test cassette, specimen, and buffer to equilibrate to room temperature (15-30°C / 59-86°F) prior to testing.

Step 3a: SERUM Specimens Only •

Transfer fresh whole blood into 2 mL centrifuge cup, filling at least $\frac{3}{4}$ full. **Wait 10 minutes** for blood clotting to occur in the centrifuge cup. **Place the sample into the centrifuge.** Start the centrifuge and allow to **spin for 10 minutes.** *(To avoid damaging your centrifuge, balance the centrifuge by placing an equal volume water sample across from your whole blood sample)*



• **SKIP to Step 5 if SERUM testing was performed •**

• Directions for Use **Continued** •

Step 3b: PLASMA Specimens Only •

Transfer fresh whole blood into lithium heparin treated tubes only (not supplied. Fill only to indicated fill volume or fill line on tube).

Mix Immediately (by inverting). **Place the sample into the centrifuge** soon after. No clot time needed. Start the centrifuge and allow to **spin for 10 minutes**. *(To avoid damaging your centrifuge, balance the centrifuge by placing an equal volume water sample across from your whole blood sample)*

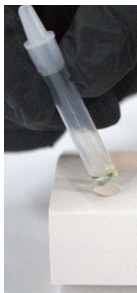
Step 4: After-Centrifuge Collection •

After 10 minutes of spinning, a clear separation on top of the cup should appear. Serum and/or plasma will appear straw yellow or light pink in color, liquid in density, and transparent. Use this portion for testing.



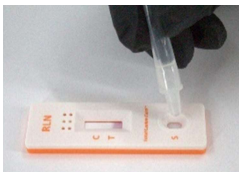
Step 5 Serum or Plasma samples should be diluted 1:1 (ratio) with provided buffer. First, add **3 drops** from the **test assay buffer bottle** into the mixture tube.

Then transfer **3 drops** of **serum or plasma** sample into the mixture tube with the provided disposable transfer pipettor found inside pouch. Then mix the bottom of the mixture tube by gently tapping or squeezing the bottom. Then, place the mixture tube tip onto the mixture tube and place it on the workstation.



• Directions for Use Continued •

Step 6 Next, invert the mixture tube and add **3 drops** (approximately 120 uL) of extracted specimen from the mixture tube (with tip) to the test cassette well (S). Then, start the timer and wait approximately **5 minutes** for test to complete.



• Step 6: Interpretation of Results •

Read the results at **5 minutes** after dispensing the specimen into the well. Do not interpret results after **10 minutes**.

• INVALID Test •



• POSITIVE Test •



• NEGATIVE Test •



REMINDER: All results should be considered with other clinical information available from a veterinarian.

• Directions for Use Continued •

Step 7: Disposal •

Dispose of used test cassettes and buffers in provided biohazard bags. Please consult local phone or internet directories for the correct information and disposal guidelines.



• Step 8a: Re-Order
by Scanning the QR Code



• Step 8b: Re-Order
by Downloading the App •



• Step 8c: OPTIONAL Re-Order by Visiting our Website •

WWW.CANINEP4.COM

• **Warranty Disclaimer** •

For animals only. Not for use in humans. Keep out of reach of children. Intended for veterinary use only. Do not freeze. Store at room temperature. Keep out of direct or artificial sunlight. User (or Purchaser) is responsible to observe all applicable local, state, or federal law and bear all risks therefor. User shall dispose of all sharps in authorized waste containers, as identified by Users local trash removal services or health departments. Please consult local phone or internet directories for the correct information and disposal guidelines. Do not dispose sharps in standard trash.

MRDS, as Distributor, warrants the kit for its intended veterinary product use and will replace any defect product purchased by User upon MRDS' receipt of timely written notice by User. This shall be Users exclusive remedy and User shall not be entitled to additional or further compensation or cost.

MRDS is not responsible for pre-existing conditions (even if manifest during use of the products), abnormal response to product use not caused by defect product including but not limited to, aggression, anxiety, and destructive and/or compulsive behavior. MRDS is not responsible if death or euthanasia occurs in your pet because of illness, injury or because of behavior or emotional disorder, including stress induced ovulation losses.

Total Canine Care™ is a trademark of MR Diagnostic Services LLC. Any use or misrepresentation without the prior written permission is strictly prohibited.

Copyright © 2023 by MR Diagnostic Services LLC

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of MRDS. The information in this document is correct at the time of printing. However, MRDS reserves the right to make any necessary changes at any time without notice as our policy is one of continuous improvement.