

# Element COAG Veterinary Analyzer





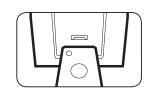


### Element COAG™ Veterinary Analyzer

**NOTE:** For access to the full user manual for this product, please visit www.heska.com/productmanuals.

#### PT/aPTT Combo Testing

- 1. Remove cartridge from the refrigerator and warm to room temperature. Leave cartridge in foil pouch until you are ready to perform the test.
- 2. Draw blood, using a 22-gauge or larger needle, into a blue top (3.2% sodium citrate) tube and invert gently to mix. Make sure to fill the tube to the indicator mark.
- 3. From the Home Screen, select the test to be run.
- 4. When "Please insert new cartridge" is shown on the screen, insert a new test cartridge into the cartridge slot.
- 5. Use the on-screen keyboard to enter cartridge code, and touch **DONE**.
- 6. Touch **CONFIRM** to acknowledge the specified blood sample has been obtained.
- 7. Use the on-screen keyboard to enter patient ID (sample ID is optional), and touch **DONE**.
- 8. Start the test by touching **NEXT**.
- 9. When the message, "Add sample and wait" is displayed on the screen, invert the blood tube 10 times and fill the sample well using the supplied pipette. Make sure to fill the entire sample well with whole blood (approximately 60 µl).
- 10. Test result is displayed on the screen within 15 minutes. Touch **DONE** to return to the HOME screen.







#### Equine Fibrinogen Testing

- 1. Remove cartridge from refrigerator and warm to room temperature. Remove a pre-filled diluent tube from the kit box. Do not remove cartridge from foil pouch until ready to perform test.
- 2. Draw blood using a 22-gauge or larger needle, into a blue top (3.2% or 3.8% sodium citrate) tube and invert gently 10 times to mix. Make sure to fill the tube to the indicator mark.
- 3. Centrifuge sample to platelet-poor plasma (minimum 7.000 gx minutes). Please see centrifuge table.
- 4. From the Home Screen, select the test to be run.
- 5. Remove cartridge and pipette tip from pouch. Insert the test card into the analyzer when the message, "Please insert new cartridge" is shown on the screen.
- 6. When prompted to do so, enter the cartridge code located on the pouch label and touch **DONE**.
- 7. Ensure that no diluent is caught at the top of the pre-filled diluent tube by tapping the tube on a hard surface prior to piercing the lid. Using the end of the fixed volume pipette (without pipette tip attached), puncture the foil on the diluent tube.
- 8. Use 100 µL fixed volume pipette and supplied pipette tip to extract 100 µL plasma from citrate test tube.
- 9. Deposit the 100 μL plasma into the supplied pre-filled diluent tube.
- 10. Mix diluent and plasma using the pipette by aspirating and expelling a minimum of 5 times within the diluent tube.
- 11. Touch **CONFIRM** to acknowledge proper sample preparation per screen instructions.
- 12. Enter the Patient ID (Sample ID is optional), and touch **DONE**. Touch **NEXT**.
- 13. When the message, "Add 100 μL sample and wait" is displayed on the screen, extract 100 μL sample from the diluent tube using the pipette. Deposit sample into the well on the cartridge.
- 14. The test results will be displayed approximately 10 minutes after sample has been added to the cartridge. To return to the analyzer's HOME screen, touch **DONE**.

## **Equine Fibrinogen Testing**



#### Canine Fibrinogen Testing

- 1. Remove cartridge from refrigerator and warm to room temperature. Remove a pre-filled diluent tube from the kit box. Do not remove cartridge from foil pouch until ready to perform test.
- 2. Draw blood using a 22-gauge or larger needle, into a blue top (3.2% or 3.8% sodium citrate) tube and invert gently 10 times to mix. Make sure to fill the tube to the indicator mark.
- 3. Centrifuge sample to platelet-poor plasma (minimum 7.000 gx minutes). Please see centrifuge table.
- 4. From the HOME SCREEN, select the test to be run.
- 5. Remove cartridge and pipette tip from pouch. Insert the test cartridge into the analyer when the message, "Please insert new cartridge" is shown on the screen.
- 6. When prompted to do so, enter the cartridge code located on the pouch label and touch DONE.
- 7. Ensure that no diluent is caught at the top of the pre-filled diluent tube by tapping the tube on a hard surface prior to piercing the lid. Using the end of the fixed volume pipette (without pipette tip attached), puncture the foil on the diluent tube.
- 8. Use 100 μL pipette and supplied pipette tip to extract 100 μL plasma from citrate test tube.
- 9. Deposit the 100  $\mu$ L fixed volume plasma into the supplied pre-filled diluent tube.
- 10. Mix diluent and plasma using the pipette by aspirating and expelling a minimum of 5 times within the diluent tube.
- 11. Touch **CONFIRM** to acknowledge proper sample preparation per screen instructions.
- 12. Enter the Patient ID (Sample ID optional), and touch **DONE**. Touch **NEXT**.
- 13. When the message, "Add 100 μL sample and wait" is displayed on the screen, extract 100 μL sample from the diluent tube using the pipette. Deposit sample into the well on the cartridge.
- 14. The test results will be displayed approximately 10 minutes after sample has been added to the cartridge. To return to the analyzer's HOME screen, touch **DONE**.

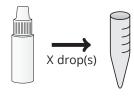
## **Canine Fibrinogen Testing**

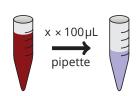




### Canine Blood Typing

- 1. Remove cartridge from refrigerator and warm to room temperature. Remove the diluent bottle from the kit box. Leave cartridge in foil pouch until you are ready to perform the test.
- 2. Draw blood using a 22-gauge or larger needle, into a purple top (EDTA) tube and invert gently to mix.
- 3. Determine the hematocrit of the sample.
- 4. From the HOME SCREEN, select the test to be run.
- 5. Remove cartridge and pipette tip from pouch. Insert the test cartridge into the analyzer when the message, "Please insert new cartridge" is displayed on the screen.
- 6. When prompted to do so, enter the cartridge code located on the pouch label and touch **DONE**.
- 7. Touch **CONFIRM** to acknowledge proper sample preparation per screen instructions.
- 8. Enter the Patient ID (Sample ID optional), and touch **DONE**. Touch **NEXT**.
- 9. When prompted to do so, enter the measured hematocrit using the on-screen keyboard and touch **NEXT**. Based on the hematocrit input, the analyzer will calculate the number of diluent drops needed for dilution of the blood sample.
- 10. Dilute the sample following the on-screen instructions. Dispense the number of drops of diluent stated on the screen into the supplied diluent tube.
- 11. Add 100 μL of blood into the diluent using a 100 μL fixed volume pipette and the pipette tip supplied in the pouch.
- 12. Mix diluent and blood using the pipette by aspirating and expelling a minimum of 5 times within the diluent tube.
- 13. Touch **NEXT**. When the message, "Add 100 µL sample and wait" is displayed on the screen, extract 100 µL sample from the diluent tube using the fixed volume pipette and deposit the sample into the well on the cartridge.
- 14. The test results will be displayed in approximately 5 minutes. Touch **DONE** to return to the HOME screen.







#### Feline Blood Typing

- 1. Remove cartridge from refrigerator and warm to room temperature. Remove a pre-filled diluent tube from the kit box. Leave cartridge in foil pouch until you are ready to perform the test.
- 2. Draw blood using a 22-gauge or larger needle, into a purple top (EDTA) tube and invert gently to mix.
- 3. Determine the hematocrit of the sample.
- 4. From the HOME SCREEN, select the test to be run.
- 5. Remove cartridge and pipette tip from pouch. Insert the test cartridge into the analyzer when the message, "Please insert new cartridge" is displayed on the screen.
- 6. When prompted to do so, enter the cartridge code located on the pouch label and touch **DONE**.
- 7. Touch **CONFIRM** to acknowledge proper sample preparation per screen instructions.
- 8. Enter the Patient ID (Sample ID optional), and touch **DONE**. Touch **NEXT**.
- 9. When prompted to do so, enter the measured hematocrit using the on-screen keyboard and touch **NEXT**. Based on the hematocrit input, the analyzer will calculate the amount of blood needed to be added to the diluent tube.
- 10. Ensure no diluent is caught at the top of the pre-filled diluent tube by tapping the tube on a hard surface prior to piercing the lid. Using the end of the fixed volume pipette (without pipette tip attached), puncture the foil on the diluent tube.
- 11. Dilute the sample following the on-screen instructions. Use the 100 µL fixed volume pipette to add blood to the diluent.
- 12. Mix diluent and blood using the pipette by aspirating and expelling a minimum 5 times within the diluent tube.
- 13 Touch **NEXT**. When the message, "Add 100 μL sample and wait" is displayed on the screen, extract 100 μL sample from the diluent tube using the fixed volume pipette and deposit the sample into the well on the cartridge.
- 14. The test results will be displayed in approximately 5 minutes. Touch **DONE** to return to the HOME screen.



## Centrifuge Table

The table below lists the required centrifugation time to obtain platelet-poor plasma as needed by the Element COAG Fibrinogen tests. Some centrifuges do not display the g-loading of the sample but the RPM (revolutions per minute) of the centrifuge, in that case use the table below to find the required centrifugation time for a given RPM and centrifuge radius.

The radius of the centrifuge is the distance between the axis of rotation and the middle of the test tube when it is placed in the centrifuge.

| Centrifuge radius<br>[cm] | RPM<br>[1/min] | Acceleration<br>[g] | Required spin<br>time [min] |
|---------------------------|----------------|---------------------|-----------------------------|
| 2.5                       | 5,000          | 698                 | 11                          |
| 2.5                       | 6,000          | 1005                | 7                           |
| 2.5                       | 7,000          | 1368                | 6                           |
| 2.5                       | 8,000          | 1787                | 4                           |
| 2.5                       | 9,000          | 2261                | 4                           |
| 2.5                       | 10,000         | 2792                | 3                           |
| 5.0                       | 5,000          | 1396                | 6                           |
| 5.0                       | 6,000          | 2010                | 4                           |
| 5.0                       | 7,000          | 2736                | 3                           |
| 5.0                       | 8,000          | 3574                | 2                           |
| 5.0                       | 9,000          | 4523                | 2                           |
| 5.0                       | 10,000         | 5584                | 2                           |

| Centrifuge radius<br>[cm] | RPM<br>[1/min] | Acceleration<br>[g] | Required spin<br>time [min] |
|---------------------------|----------------|---------------------|-----------------------------|
| 7.5                       | 5,000          | 2094                | 4                           |
| 7.5                       | 6,000          | 3015                | 3                           |
| 7.5                       | 7,000          | 4104                | 2                           |
| 7.5                       | 8,000          | 5360                | 2                           |
| 7.5                       | 9,000          | 6784                | 2                           |
| 7.5                       | 10,000         | 8375                | 1                           |
| 10.0                      | 5,000          | 2792                | 3                           |
| 10.0                      | 6,000          | 4020                | 2                           |
| 10.0                      | 7,000          | 5472                | 2                           |
| 10.0                      | 8,000          | 7147                | 1                           |
| 10.0                      | 9,000          | 9045                | 1                           |
| 10.0                      | 10,000         | 11,167              | 1                           |

