

GEL TEST PROCEDURE

Gel.Test DAT *Equine*

PROCEDURE FOR EQUINE DIRECT ANTI-GLOBULIN TEST
(COOMBS TEST)

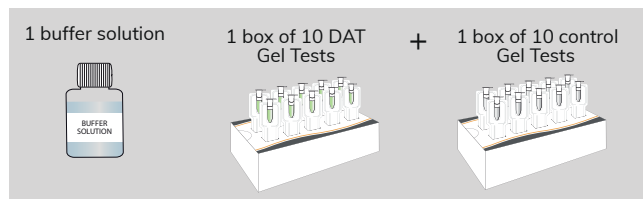


15 min



ALVEDIA
alice veterinary diagnostics

Material provided:



MOVIE PROCEDURE
(Scan the QR code)

- Test result
- Record result
- Troubleshooting

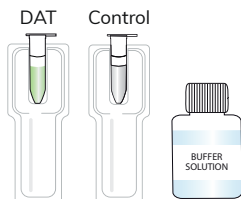
SAMPLE MATERIAL: Patient's packed red blood cells (pRBCs), drawn into **EDTA only**. **DO NOT USE HEPARIN**.
For reliable results, use of freshly collected blood is indicated (< 3 days at 2 - 8 °C).
If blood sample > 3 days OR hemolyzed: wash 1 time the blood.

MATERIAL REQUIRED: Specific centrifuge: Hettich EBA270 or Drucker True Bond ;
2 micropipettes (100-1000µl + 10-100µl) ; 10 test tubes (min. 1.5 ml).

A PREPARATION OF MATERIAL PROVIDED

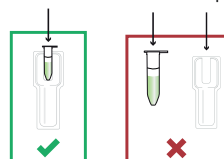


Allow the buffer solution and Gel Tests to reach **room temperature** before use.

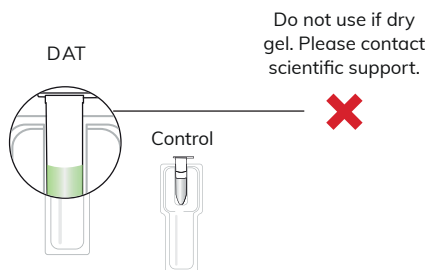
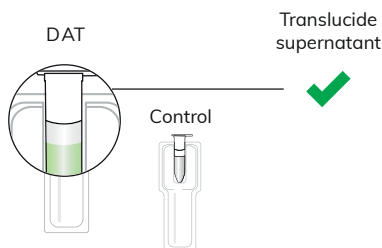


**DO NOT DISSOCIATE
FOR CENTRIFUGATION**

Gel Test = Gel tube + Gel support



B VISUAL CHECKING BEFORE USE



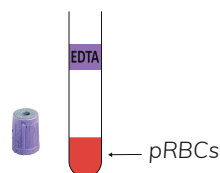
C PREPARATION OF BLOOD SAMPLE FOR DAT

PATIENT BLOOD TUBE:

Hettich: Centrifuge blood tube for 3 minutes at 3500 RPM

Drucker: Centrifuge blood tube program "Blood separation" (3200 RPM / 3min)

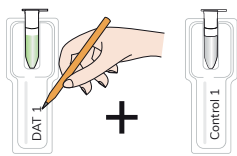
+ Remove plasma to collect pRBCs.



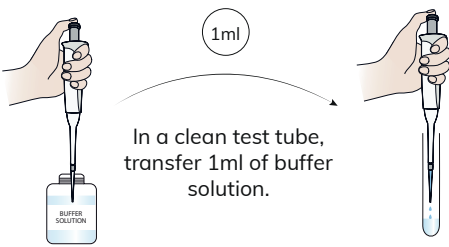
DAT GEL TEST PROCEDURE

STEP 1

Identify Gel Tests.

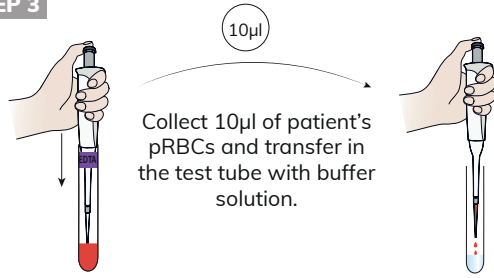


STEP 2



In a clean test tube, transfer 1ml of buffer solution.

STEP 3



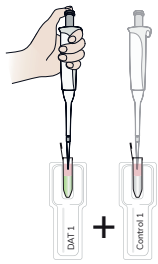
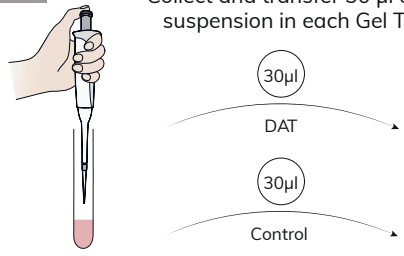
Collect 10µl of patient's pRBCs and transfer in the test tube with buffer solution.

Mix the suspension.
(Use immediately the suspension.)



STEP 4

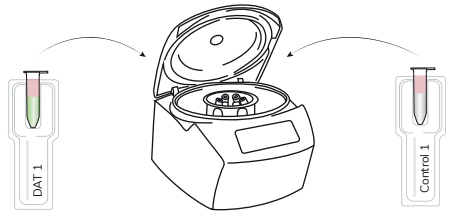
Collect and transfer 30 µl of the suspension in each Gel Test.



Drop gently the suspension on the top of the gel without touching the gel with the pipette.

STEP 5

HETTICH: Centrifuge Gel Tests for 10 minutes at 1500 RPM
DRUCKER: Centrifuge Gel Tests program "Gel Test" (1500 RPM / 10min)



STEP 6

Scan your test on the app using the gel test photo booth:

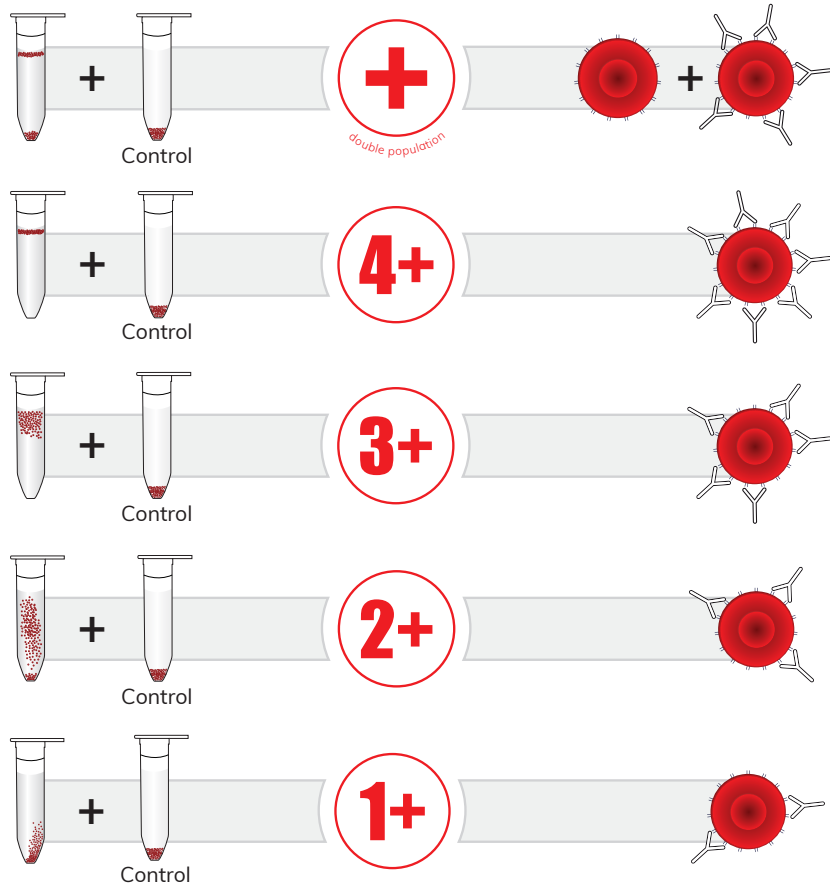


RESULT INTERPRETATION

NEGATIVE DAT: Absence of immunoglobulin (IgG & IgM) and / or C3 components binding to the RBC surface.



POSITIVE DAT: Presence of immunoglobulin (IgG & IgM) and / or C3 components binding to the RBC surface.



IF POSITIVE CONTROL: WASH THE RBCs 1 TIME AND PERFORM THE TEST AGAIN

LIMITATIONS

- If the blood tube is hemolyzed OR more than 72 hours: wash 1 time in PBS or saline buffer (NaCl 0.9%) to obtain washed pRBCs.
- Do not use Gel Test tubes which show signs of drying.
- Gel Test tubes which show air bubbles or gel drops in the upper part of the tube must be centrifuged before use.
- Strict adherence to the procedures and recommended equipment, especially the Hettich EBA270 and Drucker True Bond, is essential for a reliable and validated result.
- A non-specific centrifuge (fixed angle centrifuge) will give you false positive results.
- Debris, fibrin residues or other artefacts may cause a few unagglutinated cells to trap on top of gel, but these should be interpreted as negative.
- Use of suspension solutions others than the provided one may modify the reactions.
- Too diluted or concentrated red blood cell suspensions can cause aberrant results.