



Gel Test

Canine Direct Anti-Globulin Test

QR CODE : Movie Procedure



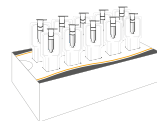
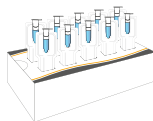
PROCEDURE FOR CANINE DIRECT ANTI-GLOBULIN TEST (COOMBS TEST)

Material provided :

1 buffer solution

1 box of 10 DAT
Gel Tests

1 box of 10 neutral
Gel Tests



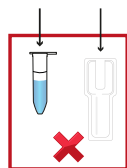
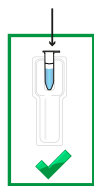
Sample material : Patient's packed red blood cells (pRBCs).
Preferably drawn into EDTA, CPD or ACD. **Do not use Heparin.**
For reliable results, use of freshly collected blood is indicated (<3 days at 2 - 8 °C).
If blood sample > 3 days OR hemolyzed : wash 1 time the blood.

Material required : **Swinging bucket centrifuge*** ; 2 micropipettes (100-1000µl + 10-100µl) ; 1 test tube ; tips.

***WARNING : Use only the swinging bucket centrifuge Hettich EBA270 or Drucker Horizon 6.**

N°1 : Preparation of material provided before use

Gel Test = Gel tube + Gel support



DO NOT
DISSOCIATE

DAT Neutral



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

[*minimum 30 minutes at RT]

N°2 : Centrifugation of the Gel Test before use

Centrifuge the Gel Tests for **2 minutes** at **3000 RPM**, in order to remove air bubbles or gel drops in the upper part of the Gel Test.



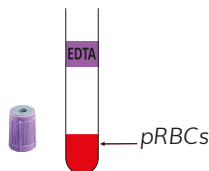
Gel Test
DAT

Gel Test
neutral

N°3 : Preparation of blood sample for DAT

Patient :

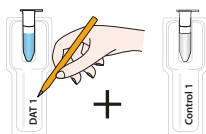
Centrifuge blood tube for **5 minutes** at **3000 RPM**.
Discard the plasma to collect pRBCs.



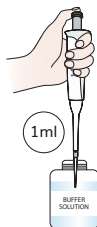
N°4 : DAT Gel Test procedure

1

Identify Gel Tests.



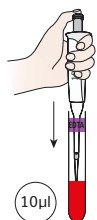
2



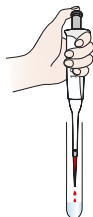
Take a test tube and
add 1ml of buffer
solution.



3



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

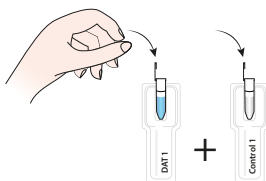


Mix the suspension.
(Use immediately
the suspension.)



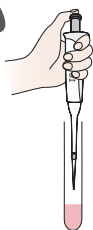
4

Open the cap.

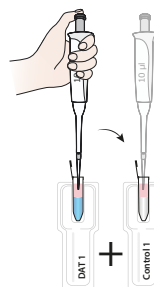


5

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

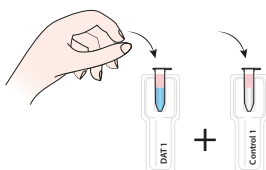


⚠ Drop gently the
suspension on the top of
the gel without touching
the gel with the pipette.



6

Close the cap.



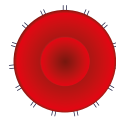
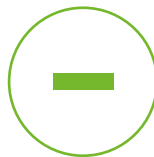
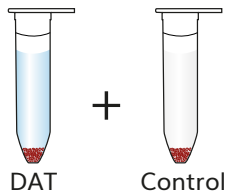
7

Centrifuge for 10 minutes
at 1500 RPM :

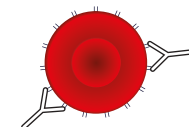
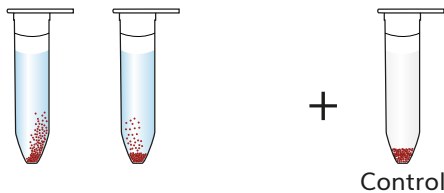
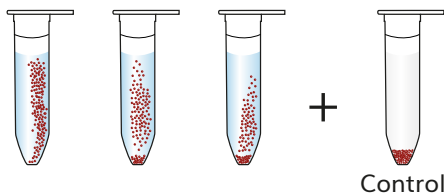
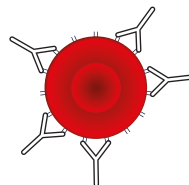
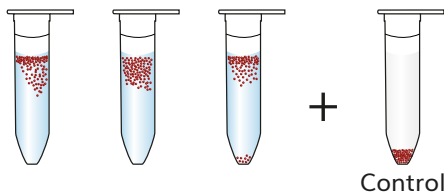
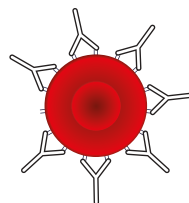
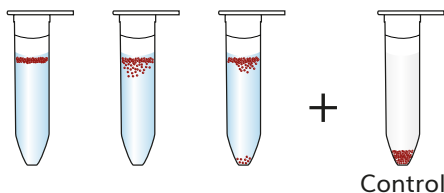


RESULT INTERPRETATION

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



POSITIVE : 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 Horizon 6, is essential for a reliable and validated result.
- A non-specific (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.

VALID GEL TEST



DAMAGED GEL TESTS

Please contact us for scientific support.

