



Gel Test

Canine Direct Anti-Globulin Test



SCAN ME

- Movie procedure
- Test result
- Record result
- Troubleshooting

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

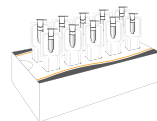
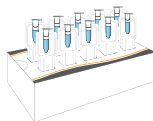
Material provided :

1 buffer solution

1 box of 10 DAT
Gel Tests

+

1 box of 10 control
Gel Tests



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).

Preparation of material provided

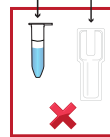
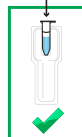


Allow the buffer solution and Gel Tests to reach **room temperature** before use.



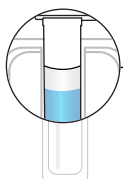
**DO NOT DISSOCIATE
FOR CENTRIFUGATION**

Gel Test = Gel tube + Gel support



Visual checking before use

DAT

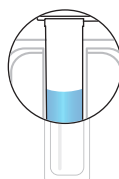


Translucide
supernatant

Control



DAT



Do not use if dry gel.
Please contact
scientific support.

Control



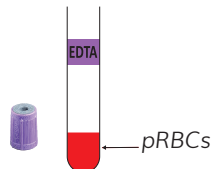
Preparation of blood sample for DAT

Patient blood tube :

Hettich : Centrifuge blood tube for 3 minutes at 3500 RPM

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

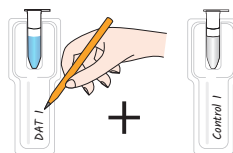
+ Remove plasma to collect pRBCs.



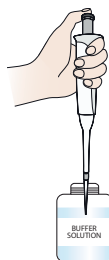
DAT Gel Test procedure

1

Identify Gel Tests.



2

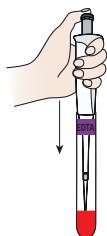


1ml

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

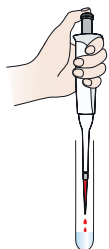


3

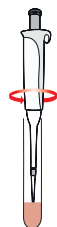


10µl

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



Mix the suspension.
(Use immediately the suspension.)



4

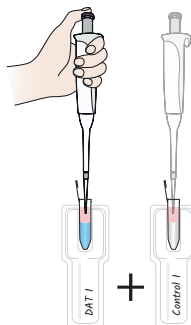
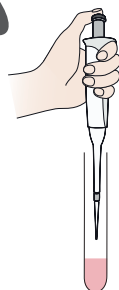
Collect and transfer 30 µl of the suspension in each Gel Test.

30µl

DAT

30µl

Control

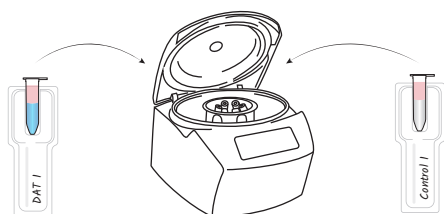


Drop gently the suspension on the top of the gel without touching the gel with the pipette.

5

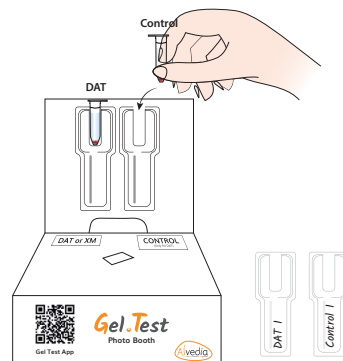
Hettich : Centrifuge Gel Tests for 10 minutes at 1500 RPM

Drucker : Centrifuge Gel Tests program "Gel Test" (1500 RPM / 10min)



6

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



RESULT INTERPRETATION

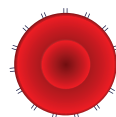
NEGATIVE DAT : **Absence** of immunoglobulin (IgG & IgM) and/or C3 components binding to the RBC surface.



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Control



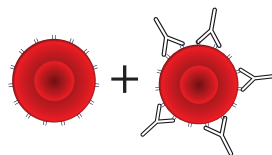
POSITIVE DAT : **Presence** of immunoglobulin (IgG & IgM) and/or C3 components binding to the RBC surface.



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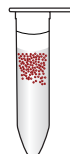
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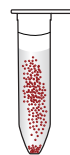
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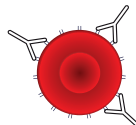
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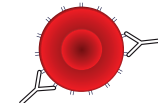
Control



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Control



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.