



Gel Test

Equine Direct Anti-Globulin Test



SCAN ME

- Movie procedure
- Test result
- Record result
- Troubleshooting

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

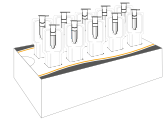
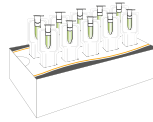
Material provided :

1 buffer solution

1 box of 10 DAT
Gel Tests

+

1 box of 10 control
Gel Tests

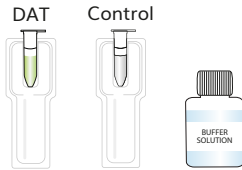


Sample material : Patient's packed red blood cells (pRBCs).
 Preferably drawn into EDTA, CPD or ACD. **Do not use Heparin.**
 For reliable results, use of freshly collected blood is indicated (<3 days at 2 - 8 °C).
 If blood sample > 3 days OR hemolyzed : wash 1 time the blood.

Material required : Specific centrifuge : Hettich EBA270 or Drucker True Bond ;
 2 micropipettes (100-1000µl + 10-100µl) ; 10 clean test tubes (5ml).

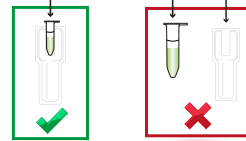
Preparation of material provided

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

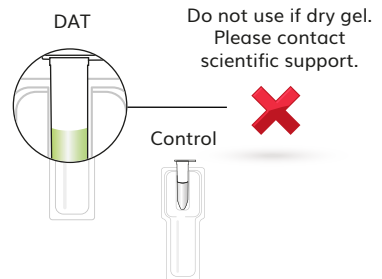
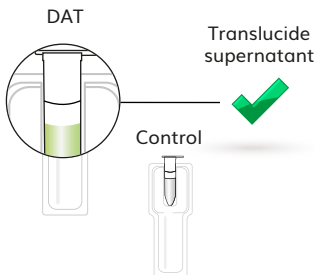


DO NOT DISSOCIATE FOR CENTRIFUGATION

Gel Test = Gel tube + Gel support



Visual checking before use

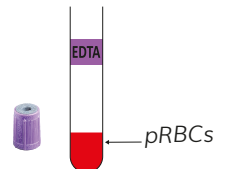


Preparation of blood sample for DAT

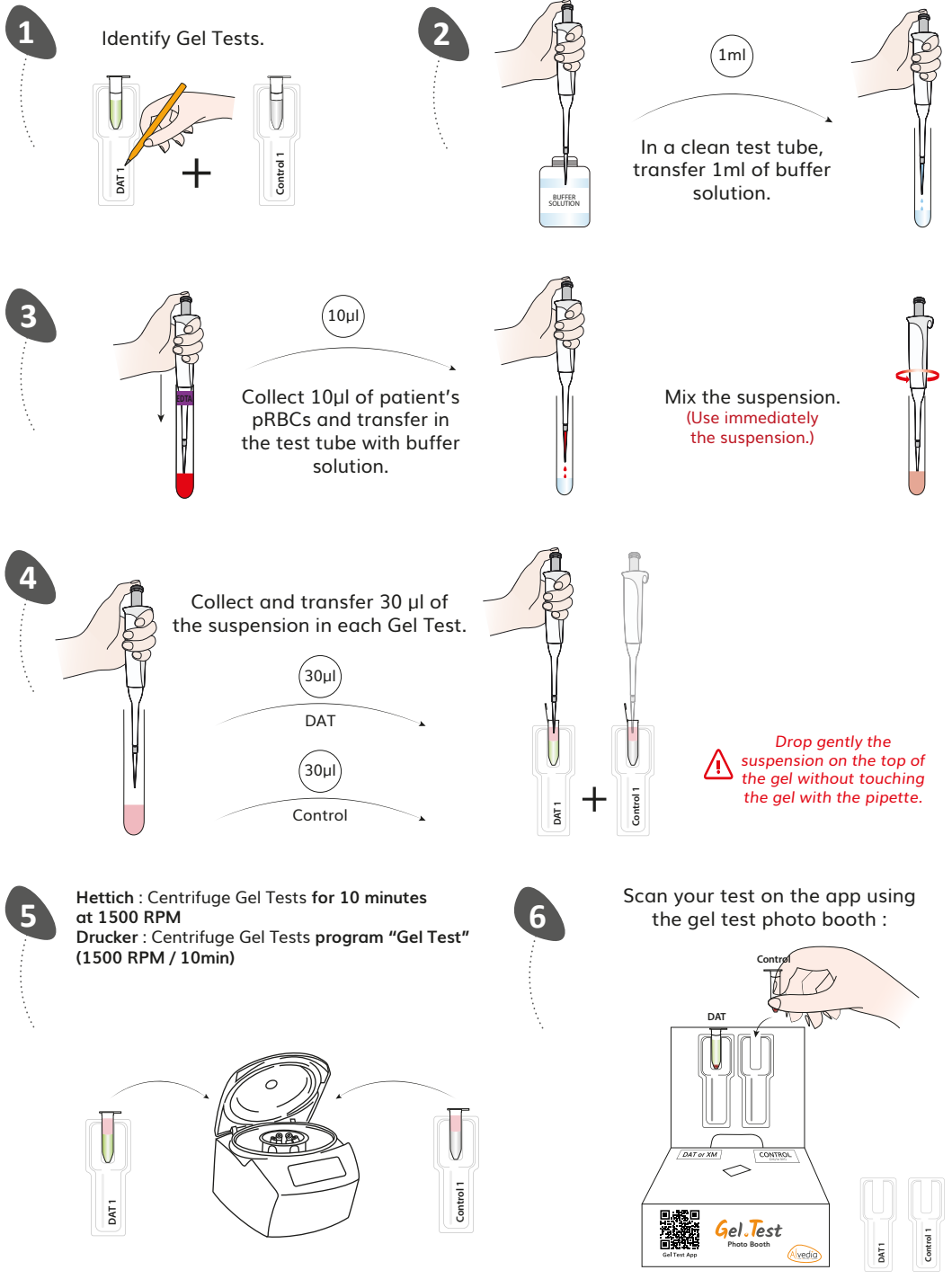
Patient blood tube :

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.

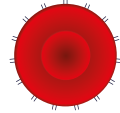
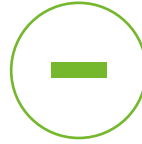
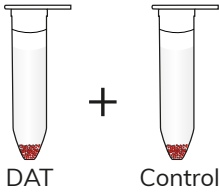


DAT Gel Test procedure

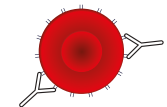
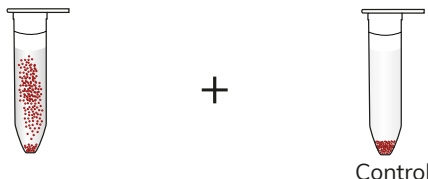
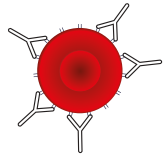
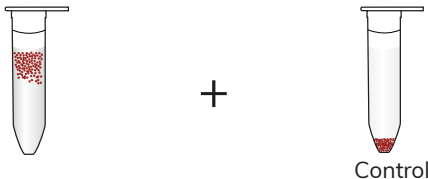
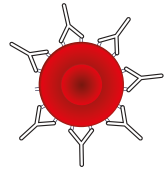
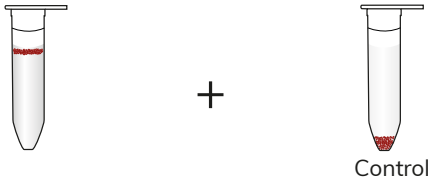
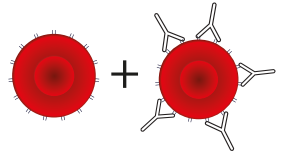


RESULT INTERPRETATION

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.