

Gel Test

Equine Direct Anti-Globulin Test

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



SCAN ME

- Movie procedure
- Test result
- Record result
- Troubleshooting

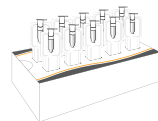
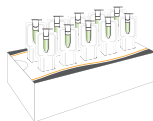
Material provided :

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 :

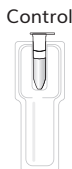
Specific centrifuge : Hettich EBA270 or Drucker True Bond ;

2 micropipettes (100-1000 μ l + 10-100 μ l) ; 10 test tubes (min. 1,5 ml).

Preparation of material provided

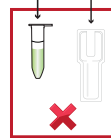
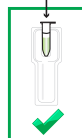


Allow the buffer solution and Gel Tests to reach **room temperature** before use.



**DO NOT DISSOCIATE
FOR CENTRIFUGATION**

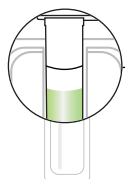
Gel Test = Gel tube + Gel support



Visual checking before use

DAT

Translucide
supernatant

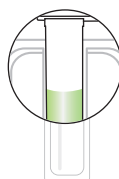


Control



DAT

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



Control



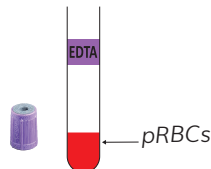
Preparation of blood sample for DAT

Patient blood tube :

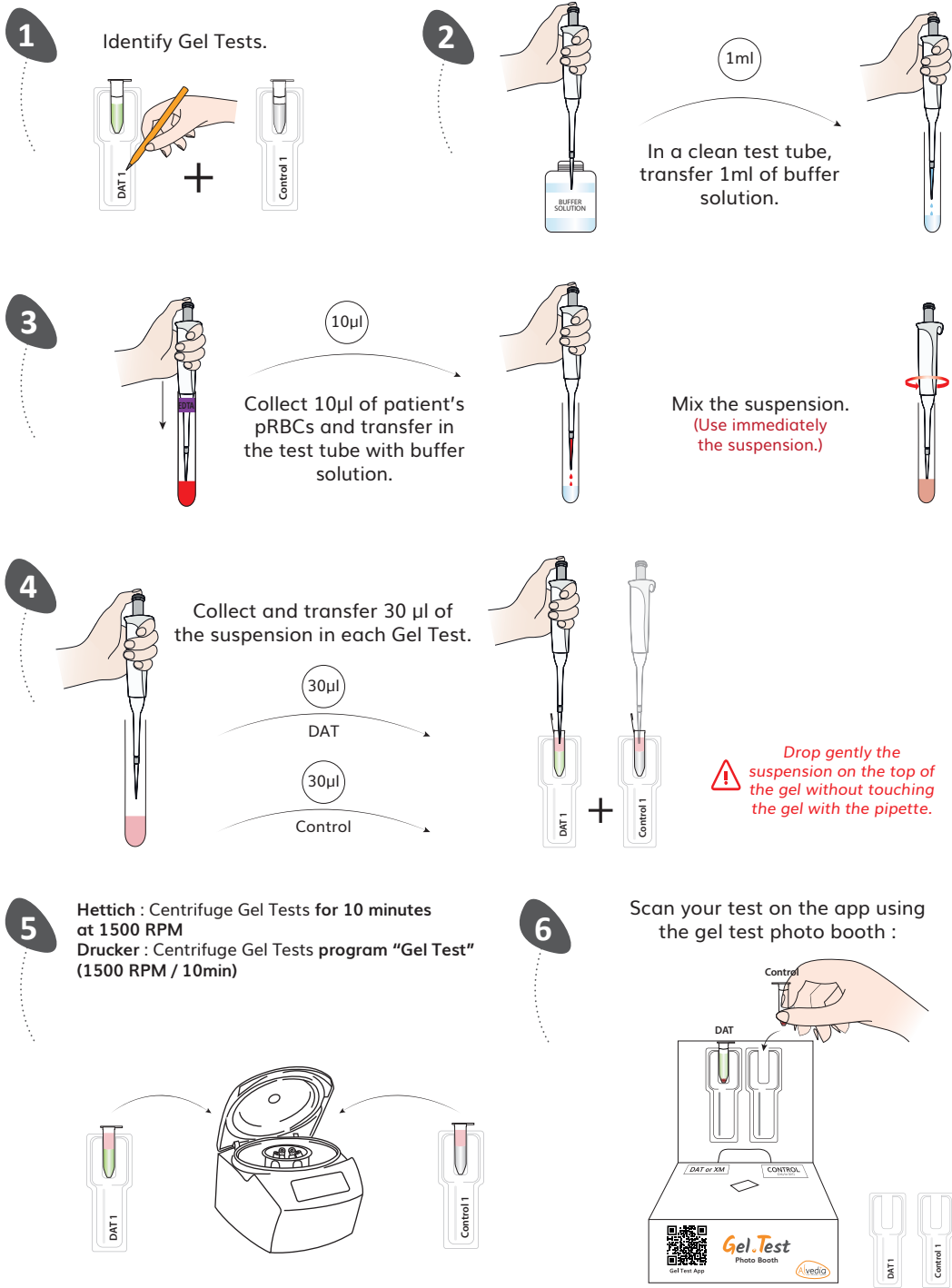
Hettich : Centrifuge blood tube for 3 minutes at 3500 RPM

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

+ Remove plasma to collect pRBCs.

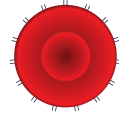
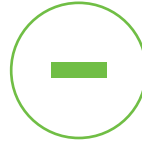
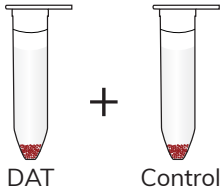


DAT Gel Test procedure

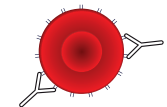
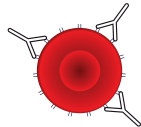
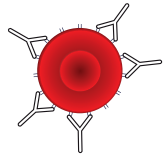
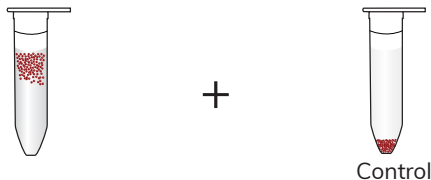
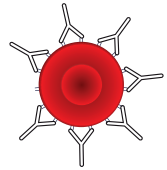
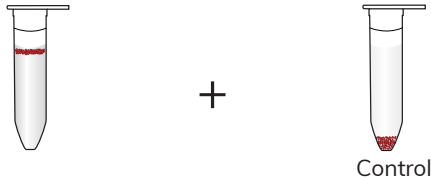
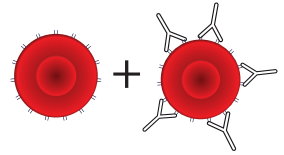


RESULT INTERPRETATION

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.