



# Gel Test

Canine Direct Anti-Globulin Test



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

Material provided :

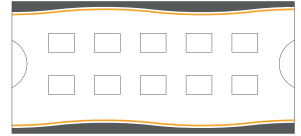
10 Gel Tests



1 buffer solution



1 box of Gel Tests



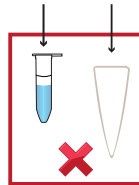
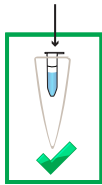
Sample material : Patient's packed red blood cells (pRBCs).  
Preferably drawn into EDTA, CPD or ACD. **Do not use Heparin.**  
For reliable results, use of freshly collected blood is indicated (<3 days at 2 - 8 °C).

Further material required : Centrifuge Hettich EBA270 ; micropipette ; test tubes ; tips.

**WARNING : Use only the swinging bucket centrifuge Hettich EBA270.**

### N°1 : Preparation of material provided before use

Gel Test = Gel tube + Gel support



DO NOT  
DISSOCIATE



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

### N°2 : Centrifugation of the Gel Test before use

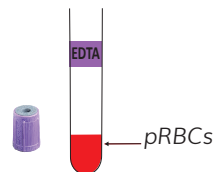
Centrifuge the Gel Test for 2 minutes at 3000 RPM with Hettich EBA270, in order to remove air bubbles or gel drops in the upper part of the Gel Test.



### N°3 : Preparation of blood sample for DAT

**Patient :**

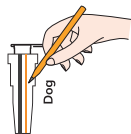
Centrifuge blood tube for 5 minutes at 3000 RPM, with Hettich EBA270.  
Discard the plasma to collect pRBCs.



# N°4 : DAT Gel Test procedure

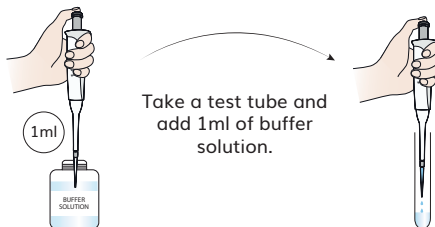
1

Identify the Gel Test.



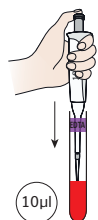
2

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

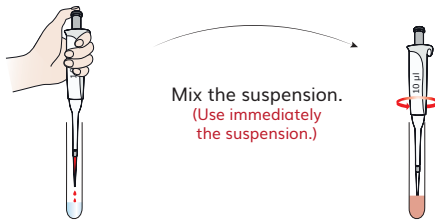


3

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

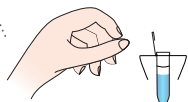


Mix the suspension.  
*(Use immediately the suspension.)*



4

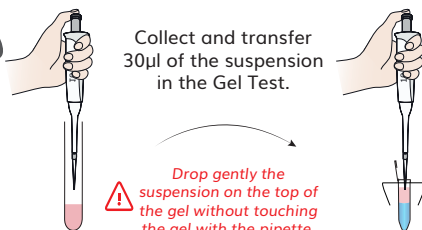
Open the cap.



5

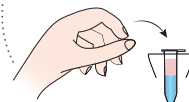
Collect and transfer 30µl of the suspension in the Gel Test.

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



6

Close the cap.



7

Insert the Gel Test and a balance Gel Test in the centrifuge.



Gel Test

Don't forget the balance or use the auto-control Gel Test.

8

Centrifuge for 10 minutes at **1500 RPM** with Hettich **EBA270** :

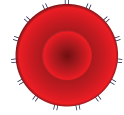
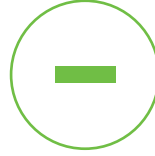
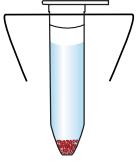


**If positive result :  
Perform an  
AUTO-CONTROL.**

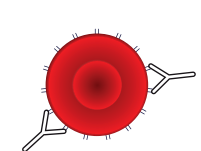
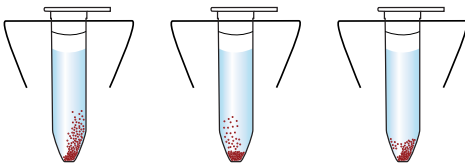
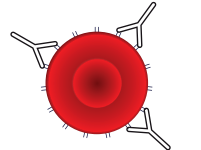
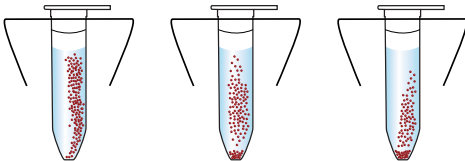
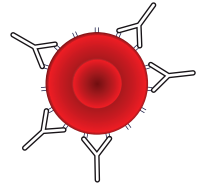
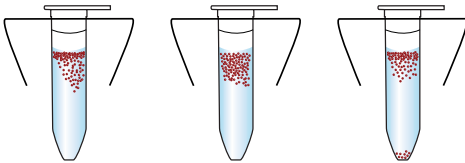
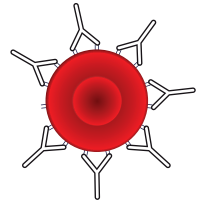
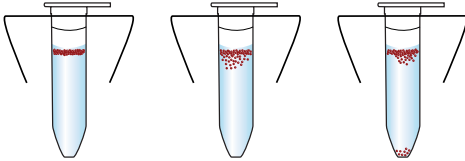
Follow the same DAT procedure **using neutral Get Test.**

# 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.



Troubleshooting  
Please contact the Scientific Service Laboratory  
contact@alvedia.com  
+33(0)478 380 239

**Alvedia**  
Alice Veterinary Diagnostic

## LIMITATIONS

- 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 tubes must be centrifuged before use.
- Strict adherence to the procedures and recommended equipment, especially the Hettich EBA270, 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 the gel, but these tests 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.
- If the blood tube is hemolyzed, wash 3 times in PBS or saline buffer (NaCl 0,9%) to obtain washed pRBCs. Washing RBCs movie procedure : [www.alvedia.com](http://www.alvedia.com)

### VALID GEL TEST



### DAMAGED GEL TESTS

Please contact us for scientific support.

