GEL TEST PROCEDURE — Gel Test XM *Canine*

PROCEDURE FOR CANINE MAJOR CROSSMATCH

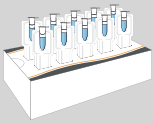
25 min

ALVEDIA
alice veterinary diagnostics

Material provided:

1 buffer solution

1 box of 10 DAT Gel Tests



MOVIE PROCEDURE
(Scan the QR code)
- Test result
- Record result
- Troubleshooting

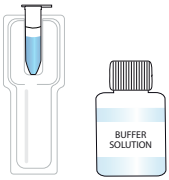
SAMPLE MATERIAL: **DONOR** blood tube or blood bag segment. **RECIPIENT** blood tube.
Preferably drawn into EDTA, CPDA or ACD only. **Do not use Heparin.**
If blood bag segment > 7 days: wash 1 time the blood.

MATERIAL REQUIRED: Specific centrifuge: Hettich EBA270 or Drucker True Bond ;
2 micropipettes *(100-1000µl + 10-100µl)* ; 20 test tubes (min. 1.5 ml).

A PREPARATION OF MATERIAL PROVIDED

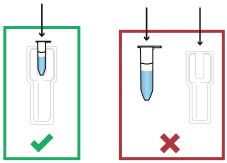
Allow the buffer solution and Gel Tests to reach room temperature before use.

XM



DO NOT DISSOCIATE
FOR CENTRIFUGATION

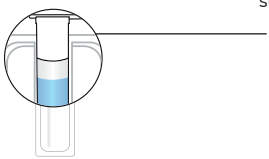
Gel Test = Gel tube + Gel support



B VISUAL CHECKING BEFORE USE

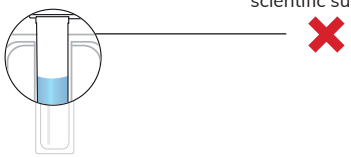
XM

Translucent supernatant



XM

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



C PREPARATION OF BLOOD SAMPLE FOR DAT

DONOR BLOOD TUBE

Centrifuge blood tube:
- **with Hettich: 3 minutes at 3500 RPM**
- **with Drucker: program "Blood separation" (3200 RPM / 3min)**

Discard plasma.

pRBCs

RECIPIENT BLOOD TUBE

Centrifuge blood tube:
- **with Hettich: 3 minutes at 3500 RPM**
- **with Drucker: program "Blood separation" (3200 RPM / 3min)**

Plasma

*MINOR XM: Reverse the blood samples by collecting **RECIPIENT** pRBCs and **DONOR** Plasma

GEL TEST PROCEDURE — Gel.Test XM *Canine*

D RBCS SUSPENSION PREPARATION

STEP 1

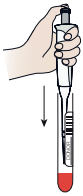
Identify the Gel Test.

STEP 2

1ml

Take a first test tube, transfer 1ml of buffer solution.

STEP 3



10µl

Collect 10µl of **DONOR*** pRBCs and transfer in the first test tube.

Mix the suspension.

*For MINOR XM collect 10µl of **RECIPIENT** pRBCs

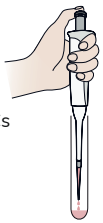
D MAJOR XM GEL TEST PROCEDURE

STEP 1

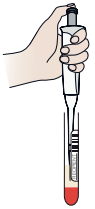
Take a second test tube

50µl

Transfer 50µl of RBCs suspension in the second test tube.

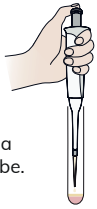


STEP 2



25µl

Transfer 25µl of **RECIPIENT*** plasma in the second test tube.



*For MINOR XM collect 25µl of **DONOR** plasma

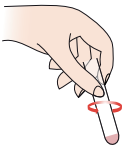
STEP 3

Mix gently & incubate at room temperature :

10 min

STEP 4

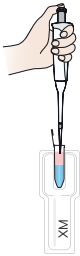
Mix gently the incubated suspension.



STEP 5

30µl

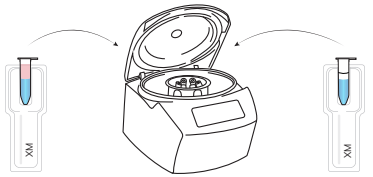
Transfer 30µl of incubated suspension in the Gel Test.



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

STEP 6

Hettich: Centrifuge Gel Tests **for 10 minutes at 1500 RPM**
Drucker: Centrifuge Gel Tests **program "Gel Test" (1500 RPM / 10min)**

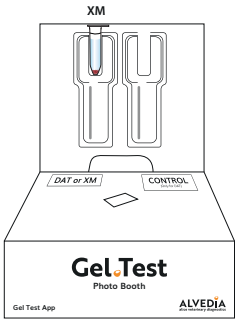


Gel Test

Balance Gel Test

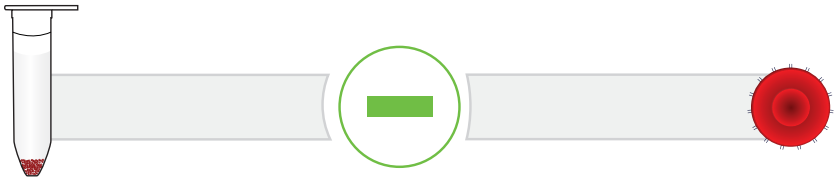
STEP 7

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

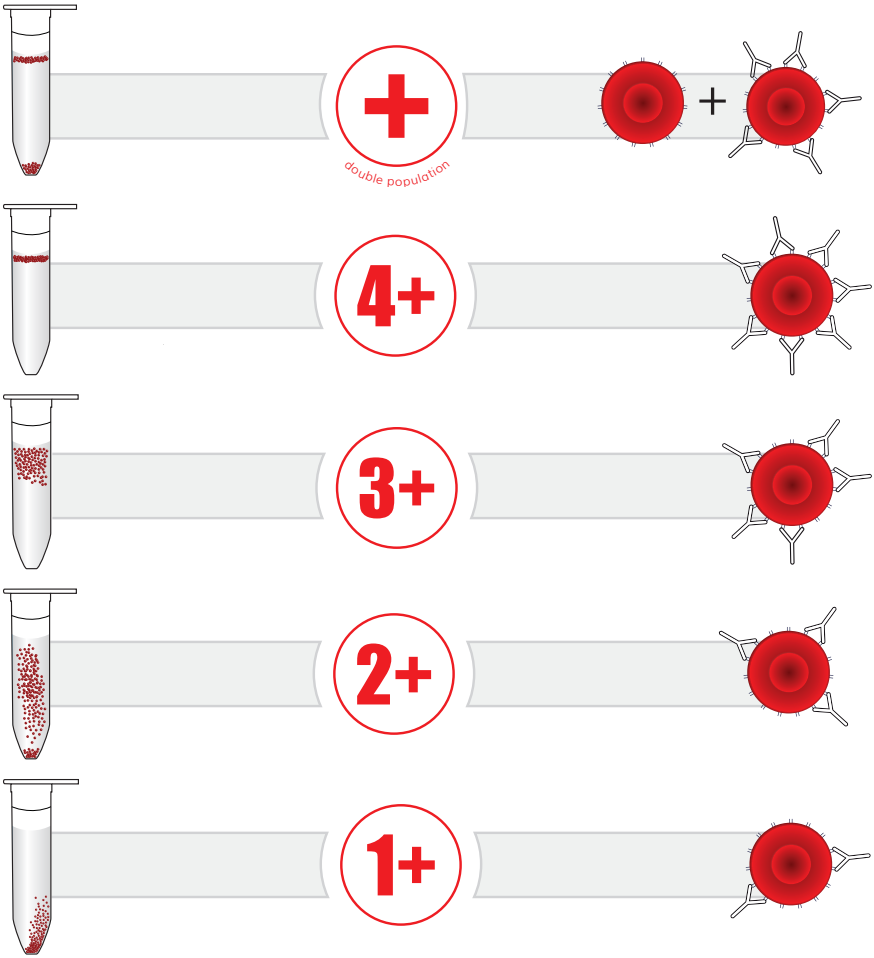


RESULT INTERPRETATION

Compatibility = SAFE TRANSFUSION



Incompatibility = DO NOT TRANSFUSE



SCIENTIFIC INFORMATION

Scientific information:

- This test allows you to detect all DEA incompatibilities, including DEA 1, DEA 4, DEA 7... and other red blood cell alloantibodies.
- This test is used to detect alloantibodies after a mismatched transfusion or rare naturally occurring alloantibodies.
- Blood typing for DEA 1 is always recommended before any transfusion.
- Positive XM reactions may be observed in IMHA patients due to circulating autoantibodies present in the recipient plasma.
- Test results must be interpreted in conjunction with the clinical and therapeutic context.

LIMITATIONS

- Blood bag segment stored for more than 7 days: 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.

Troubleshooting / Information
Please contact the Scientific Support
contact@alvedia.com
+33(0)478 380 239

ALVEDIA
alice veterinary diagnostics