



Gel Test

Major XM Equine

INDIVIDUAL PROCEDURE FOR PRE-TRANSFUSION TESTING

Material provided :

1 gel test column
(I)



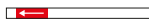
1 balance column
(J)



1 suspension buffer
(C)



Blood collector strip
(A)



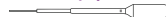
1 test tube
(E)



2 small pipettes
(D + F)



1 narrow body pipette
(H)



Sample material : Donor packed red blood cells (pRBCs) (B) and Recipient plasma (G).

Preferably drawn into EDTA, CPD or ACD. **Do not use Heparin.**

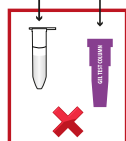
For reliable results, use of freshly collected blood is indicated (<3 days at 2 - 8 °C).

Further material required : Centrifuge Hettich EBA270

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



20°C 25°C

Allow the box
to reach room temperature before use.

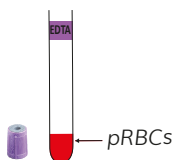
N°2 : Centrifugation of the columns before use

Centrifuge the gel test column (I) and the balance column (J) 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 samples for MAJOR XM

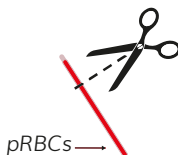
Centrifuge blood tube for 5 minutes at 3000 RPM, with Hettich EBA270. Discard the plasma to collect pRBCs.



DONOR

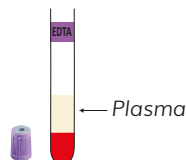
OR

Collect blood from blood bag segment.

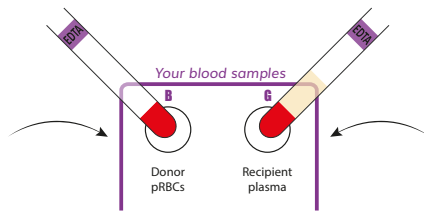


RECIPIENT

Centrifuge blood tube for 5 minutes at 3000 RPM, with Hettich EBA270, in order to collect plasma.



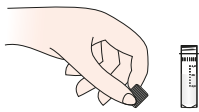
Insert your blood samples in the locations provided as shown below :



N°4 : Major XM Gel Test procedure

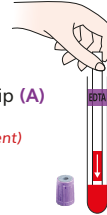
1

Take off the cap from suspension buffer (C)



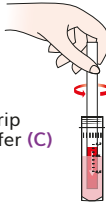
2

Collect the pRBCs with blood collector strip (A) in the Donor's tube (B) (or Donor's blood bag segment)



3

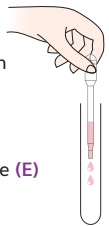
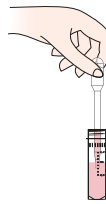
Mix gently 10 sec the blood collector strip in the suspension buffer (C)



4

Collect the RBCs suspension with the small pipette (D)

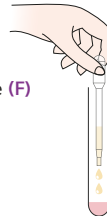
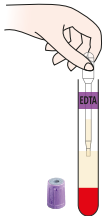
Put only 2 drops in the test tube (E)



5

Collect the plasma with the small pipette (F) in Recipient's tube (G)

Add only 2 drops in the test tube (E)



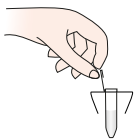
6

Mix gently 10 sec & incubate 10 min at room temperature



7

Open the cap from gel test column (I)

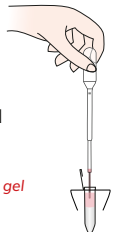
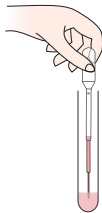


8

Collect the incubated mix with the narrow pipette (H)

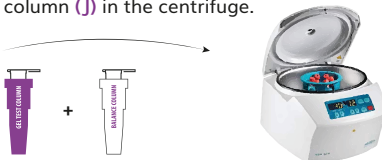
Fill the gel test column (I) to the top and close it before centrifugation.

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



9

Insert the gel test column (I) and the balance column (J) in the centrifuge.



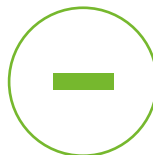
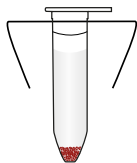
10

Centrifuge for 10 minutes at 1500 RPM with Hettich EBA270 :

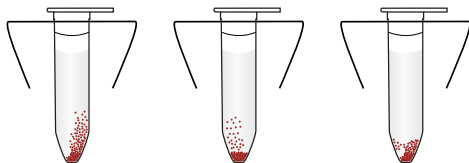
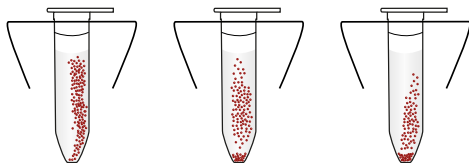
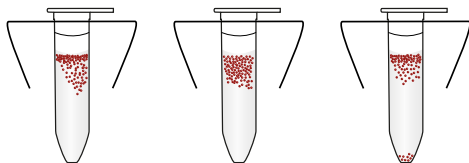
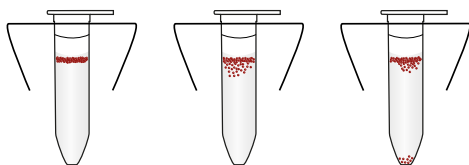


RESULT INTERPRETATION

Compatibility = **SAFE TRANSFUSION** 



Incompatibility = **DO NOT TRANSFUSE** 



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

Alvedia
Alice Veterinary Diagnostic

Procedure Alvedia - maj 09/05/2022- Small Stories ©

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

VALID GEL TEST



DAMAGED GEL TESTS

Please contact us for scientific support.

