

Gel.Test

The most sensitive laboratory technology

CANINE XM & DAT

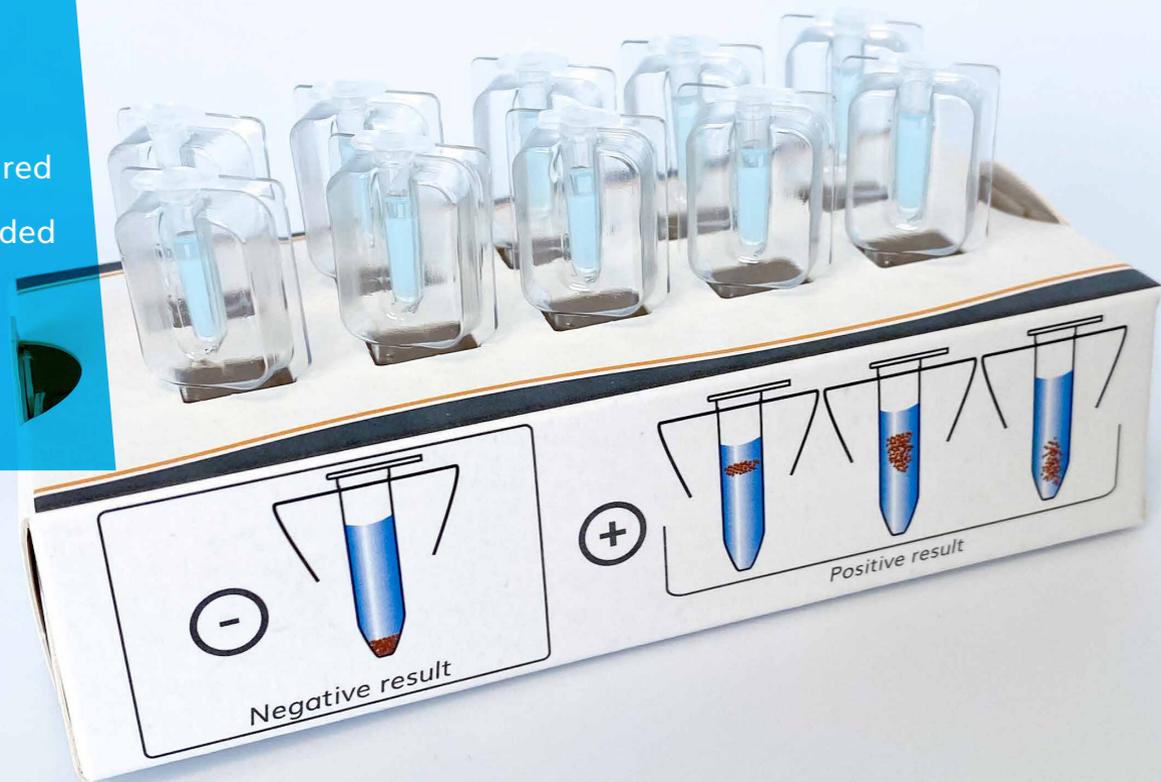
FELINE XM & DAT

EQUINE XM



ADVANTAGES OF THE GEL TEST TECHNOLOGY

- Time-saving
- High sensitivity
- No washing step procedure
- Minimal training required
- Small sample size needed
- Semi quantitative interpretation
- Easy to read



INTRODUCTION

The Gel Test technology was born in 1984 in a small laboratory serviced by the regional Blood Transfusion Center of Lyon, France.

Today, the Gel Test is widely used in the world since it quickly became the human Gold standard in the Immuno-hematology diagnostic field. Thanks to this new technology the sensitivity has been highly increased compared to conventional methods (tube tests or others).

One of the main advantages of the Gel Test technology is the fact that cells never need to be washed for crossmatching or to perform direct antiglobulin testing. Other positive effects are the small sample size needed and the time saving.

The Gel Test technology is based on special microtubes filled with a mixture of gel, buffer and reagents. Depending on the test to be carried out, the test uses a specific gel containing reagents (Antiglobulin serum or monoclonal antibodies).

A suspension of red blood cells (for direct antiglobulin test) or a mixture of red blood cells and serum (for crossmatching) is centrifuged through the gel under precise conditions.

In negative reactions, the RBCs pass through the gel and pellet in the bottom of the tube, whereas, in positive reactions, the agglutinated red blood cells are trapped in the gel and the reaction may be read for hours afterwards. The test is easy to perform, sensitive, and reproducible.

Today, Alvedia is proud to announce that our new scientific director and main developer of the human gel test technology, has successfully adapted this technique for the veterinary community. Thanks to his long experience in the Immuno-hematology field, we were able to launch the Alvedia Gel Test range which aims at becoming the new veterinarian gold standard in order to provide veterinary health professionals with the most sensitive, reliable and rapid technology.



Gel.Test XM Canine

Gel Test XM Canine 10 tests - GT-XM-C-10

PRESENTATION

Dogs have many blood types on the surface of their red blood cells (DEA1, 3, 4, 5, 7, DAL...). With the absence of monoclonal antibodies for all of these blood groups (except for DEA 1), it is mandatory to perform a reliable Crossmatch test (XM) before any transfusion. Crossmatching aims to establish a serological compatibility between the recipient and the donor to detect the presence of alloantibodies.

PROCEDURE SUMMARY

Major XM = 10µl of DONOR pRBCs + 25µl of RECIPIENT plasma/serum + 10 min incubation at room temperature + 10 min centrifugation

Minor XM = 10µl of RECIPIENT pRBCs + 25µl of DONOR plasma/serum + 10 min incubation at room temperature + 10 min centrifugation

TIME PROCEDURE

25 minutes (note that multiple XM Tests can be done at the same time)

OUR TECHNOLOGY

Our canine XM Gel Test (major and/or minor) is based on an individual Gel Test microtube filled with a mixture of gel and specific canine Antiglobulin reagent that will detect the presence of immunoglobulins (IgG & IgM) and/or C3 components binding to the red blood cells surface. Our Gel Test XM Test will allow you to pick-up incompatibilities across all canine blood groups (DEA1, 3, 4, 5, 7, DAL...).

RESULTS

Positive result = Incompatible transfusion (Presence of alloantibodies)

Negative result = Compatible transfusion (Absence of alloantibodies)

MATERIAL NEEDED

Hettich EBA270 Centrifuge + micropipettes + clean test tubes

PACKAGING

Box of 10 Gel Test XM Canine



Gel Test DAT Canine



Gel Test DAT Canine 10 tests - GT-DAT-C-10

PRESENTATION

A Direct Antiglobulin Test (DAT), or Coombs Test, is performed to **detect the presence of antibodies against red blood cells**. It is used in the diagnosis of Immune-Mediated Hemolytic Anemia (IMHA). IMHA is the most common cause of hemolytic anemia in dogs.

There are 2 forms of IMHA :

- **The first one** is idiopathic IMHA (or primary IMHA) which is probably due to a dysregulation of the immune system.
- **The Second one** (secondary IMHA) is associated with several diseases such as infection diseases (virus, bacteria, parasitic...) or haemopathy or auto immune diseases (lupus). Drug reactions could also induce a secondary IMHA.

PROCEDURE SUMMARY

10µl of pRBC's + 10 min centrifugation

TIME PROCEDURE

15 minutes (note that multiple DAT can be done at the same time)

OUR TECHNOLOGY

Our canine DAT Gel Test (or Coombs Test) is based on an individual Gel Test microtube filled with a mixture of gel and specific canine Antiglobulin reagent that will detect the presence of immunoglobulins (IgG & IgM) and/or C3 components binding to the red blood cells surface.

A positive result indicates an in vivo sensitization with the presence of auto-immune antibodies.

RESULTS

Positive result = Presence of auto-antibodies

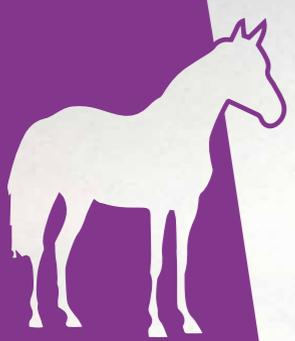
Negative result = Absence of auto-antibodies

MATERIAL NEEDED

Hettich EBA270 Centrifuge + micropipettes + clean test tubes

PACKAGING

Box of 10 Gel Test DAT Canine



Gel Test

XM Equine



Gel Test XM Equine Single Kit - GT-XM-E-SK
Gel Test XM Equine 10 tests - GT-XM-E-10

PRESENTATION

Horses have 7 main blood group systems on the surface of their red blood cells (A, C, D, K, P, Q, U) with greater than 30 red blood cells factors. With the absence of monoclonal antibodies for all of these blood groups (except for Ca), it is mandatory to perform a reliable Crossmatch test (XM) before any transfusion. Crossmatching aims to establish a serological compatibility between the recipient and the donor to detect the presence of alloantibodies.

Neonatal Isoerythrolysis (NI) is a potentially fatal condition in new born foals that results from an incompatibility of blood types between the mare and the foal. It is mandatory to perform a reliable crossmatch at birth using umbilical cord blood and serum/plasma from the mare to avoid foal neonatal isoerythrolysis.

PROCEDURE SUMMARY

Major XM = 10µl of DONOR pRBCs + 50µl of RECIPIENT plasma/serum + 10 min incubation at room temperature + 5 min centrifugation

Minor XM = 10µl of RECIPIENT pRBCs + 50µl of DONOR plasma/serum + 10 min incubation at room temperature + 5 min centrifugation

TIME PROCEDURE

25 minutes procedure (note that multiple XM Tests can be done at the same time)

OUR TECHNOLOGY

Our equine crossmatch Gel Test (major and/or minor) is based on an individual Gel Test microtube filled with a mixture of gel and specific Equine Antiglobulin reagent that will detect the presence of immunoglobulins (IgG & IgM) and/or C3 components binding to the red blood cells surface. Our Gel Test XM Test will allow you to pick-up incompatibilities across all equine blood group system (A, C, D, K, P, Q, U).

RESULTS

Positive result = Incompatible transfusion (Presence of alloantibodies)

Negative result = Compatible transfusion (Absence of alloantibodies)

MATERIAL NEEDED

- Box of 10 Gel Test tubes: Hettich EBA270 Centrifuge + micropipettes + clean test tubes
- Gel Test Single Kit: Hettich EBA270 Centrifuge

PACKAGING

- Box of 10 Gel Test XM EQUINE
- Gel Test XM Equine Single Kit with all material included (except for the centrifuge)



Gel Test
XM Feline



Gel Test XM Feline 10 tests - GT-XM-F-10

PRESENTATION

Cats have one main blood group system named AB system with 3 types: blood type A (which is the most frequent), B and AB. The presence of naturally occurring alloantibodies in type A and in type B cats requires that blood typing must be performed prior to ALL blood transfusions to avoid an acute haemolytic transfusion reaction.

According to recent publications, it is highly recommended to perform a Crossmatch Test (XM) in cats before the first transfusion. It is now well established that cats possess other blood group systems such as Mik antigen or other unknown systems.

PROCEDURE SUMMARY

Major XM = 10 μ l of DONOR pRBCs + 25 μ l of RECIPIENT plasma/serum + 10 min incubation at room temperature + 10 min centrifugation

Minor XM = 10 μ l of RECIPIENT pRBCs + 25 μ l of DONOR plasma/serum + 10 min incubation at room temperature + 10 min centrifugation

TIME PROCEDURE

25 minutes (note that multiple XM Tests can be done at the same time)

OUR TECHNOLOGY

Our Feline XM Gel Test (major and/or minor) is based on an individual Gel Test microtube filled with a mixture of gel and specific feline Antiglobulin reagent that will detect the presence of immunoglobulins (IgG & IgM) and/or C3 components binding to the red blood cells surface. Our Gel Test XM Test will allow you to pick-up incompatibilities across all feline blood groups (A, B, AB, Mik and other unknown antigens...).

RESULTS

Positive result = Incompatible transfusion (Presence of alloantibodies)

Negative result = Compatible transfusion (Absence of alloantibodies)

MATERIAL NEEDED

Hettich EBA270 centrifuge + micropipettes + clean test tubes

PACKAGING

Box of 10 Gel Test XM Feline



Gel Test DAT Feline

Gel Test DAT Feline 10 tests - GT-DAT-F-10

PRESENTATION

A Direct Antiglobulin Test (DAT), or Coombs Test, is performed to **detect the presence of antibodies against red blood cells**. It is used in the diagnosis of Immune-Mediated Hemolytic Anemia (IMHA). IMHA is the most common cause of hemolytic anemia in cats.

There are 2 forms of IMHA :

- **The first one** is idiopathic IMHA (or primary IMHA) which is probably due to a dysregulation of the immune system.
- **The Second one** (secondary IMHA) is associated with several diseases such as infection diseases (virus, bacteria, parasitic, FIV, FIP, leukemia...) or haemopathy, cancer or auto immune diseases. Drug reactions, chemicals, toxins, could also induce a secondary IMHA.

PROCEDURE SUMMARY

10µl of pRBC's + 10 min centrifugation

TIME PROCEDURE

15 minutes (note that multiple DAT can be done at the same time)

OUR TECHNOLOGY

Our Feline DAT Gel Test (or Coombs Test) is based on an individual Gel Test microtube filled with a mixture of gel and specific feline Antiglobulin reagent that will detect the presence of immunoglobulins (IgG & IgM) and/or C3 components binding to the red blood cells surface.

A positive result indicates an in vivo sensitization with the presence of auto-immune antibodies.

RESULTS

Positive result = Presence of auto-antibodies
Negative result = Absence of auto-antibodies

MATERIAL NEEDED

Hettich EBA270 Centrifuge + micropipettes + clean test tubes

PACKAGING

Box of 10 Gel Test DAT Feline

PRODUCT REFERENCES



NAME	CODE	PACKAGING
Gel Test Crossmatch (XM) Canine	GT-XM-C-10	10 Gel Test / Box*
Gel Test Direct Antiglobulin Test (DAT) Canine	GT-DAT-C-10	10 Gel Test / Box*
Gel Test Crossmatch (XM) Equine	GT-XM-E-10	10 Gel Test / Box*
Gel Test Crossmatch (XM) Equine Single Kit	GT-XM-E-SK	1 individual Test
Gel Test Crossmatch (XM) Feline	GT-XM-F-10	10 Gel Test / Box*
Gel Test Direct Antiglobulin Test (DAT) Feline	GT-DAT-F-10	10 Gel Test / Box*
Neutral Gel Test - Autocontrol (for canine and feline DAT only)	GT-AC-N-10	10 Gel Test / Box

*All Gel Test XM and DAT boxes will come with the buffer solution



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