

THANK YOU FOR
SAVING MY LIFE



Importance of blood typing

Transfusion has taken an increasingly important role in the life support of canine and feline patients. Thus, the need for quick and accurate blood typing has now been recognized in order to assure safe and efficient transfusion.

It is now essential to perform blood typing to save animal lives in case of:

- Traumatic shock
- Some infectious diseases
- Surgical procedures
- Hypoproteinemia
- Iron deficiency
- Severe anemia
- Spleen injury
- Acute hemolysis syndrome
- Severe bleeding after diseases and shocks

Importance of crossmatching

Dogs have many blood groups that exist on the surface of their red blood cells (RBCs). With the absence of in-house typing kits for all of these blood groups except for DEA 1, it is therefore recommended to perform a crossmatch prior to any transfusion.

- Major crossmatch assesses the compatibility between donor red blood cells and patient plasma/serum.
- Minor crossmatch assesses the compatibility between donor plasma/serum and patient red blood cells.

The classical technology uses an agglutination reaction to detect allo-antibodies produced after a previous transfusion and/or the presence of natural occurring antibodies.

Our immuno-chromatographic technology will detect the presence of immunoglobulins and/or C3 components binding to the red blood cells surface. A positive result indicates the presence of allo-antibodies in the plasma/serum.

A complete crossmatch will detect all clinically important anti-RBC allo-antibodies.

Importance of direct antiglobulin test

Direct antiglobulin test (DAT) aims to detect the presence of immunoglobulin and/or C3 components on the surface of patient's red blood cells (RBC). DAT is commonly used in the diagnosis of immune mediated haemolytic anemia (IMHA) in dogs.

The classical technology uses incubation of washed red blood cells suspension with antisera that will cause agglutination.

Our immuno-chromatographic technology will detect the presence of immunoglobulin (IgG & IgM) and/or C3 components binding to the red blood cells surface. A positive result indicates an in vivo sensitization and can thus be used to indicate the presence of auto-immune antibodies.

Alvedia is a company specialized in the veterinary diagnostics field, providing veterinary health professionals with the most advanced and innovative immunochromatographic technology.

Alvedia provides canine, feline & equine diagnostic product range.

DISCOVER

OUR

IMMUNOCHROMATOGRAPHIC

TECHNOLOGY

QuickTEST^{BT} TECHNOLOGY FOR CANINE & FELINE BLOOD TYPING



THE FIRST IMMUNO-CHROMATOGRAPHY TECHNOLOGY

BENEFITS

- 2 minutes procedure
- All material included
- Archivable
- Easy handling
- Reliable results
- Easy interpretation
- 100% Specificity
- Snap result

IMPORTANCE OF BLOOD TYPING

Determining blood types represents an essential process in order to ensure animals benefit from transfusion support. Nowadays, a dog or a cat has a significant probability of being transfused once or more in their lifetime. Basic blood typing is essential to perform these first and subsequent transfusions as safely as possible but also to make best use of the blood donated by donors volunteered.

Transfusion has taken an increasingly important role in the life support of canine and feline patients. Thus, the need for quick and accurate blood typing has now been recognized in order to assure safe and efficient transfusion.

IN CATS

The presence of naturally occurring alloantibodies in type A and in type B cats requires that blood typing must be performed prior to blood transfusion to avoid acute haemolytic transfusion reaction, and in breedings to prevent neonatal isoerythrolysis. Blood can be taken directly from the umbilical cord.

IN DOGS

The determination of DEA 1 antigen is strongly recommended before any blood transfusion to avoid a potent alloantibody response against this antigen and to avoid acute haemolytic transfusion reaction.

OUR TECHNOLOGY

The system is based on the migration of red blood cells on a membrane. Monoclonal antibodies specific to each antigen (DEA 1 in dogs & A/B in cats) have been incorporated on the membrane.

These antibodies will retain positive antigens (DEA 1 in dogs & A/B in cats).

A positive result is characterized by the presence of 1 or 2 red lines in front of the A and/or B for the feline Quick Test. A positive result is characterized by the presence of a red line in front of DEA 1 for the canine Quick Test (see below).



EXAMPLES OF OUR QUICK TEST BLOOD TYPING RESULTS

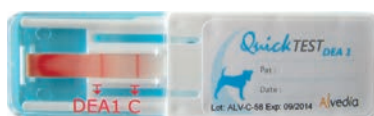
Quick TEST BT



Quick TEST BT

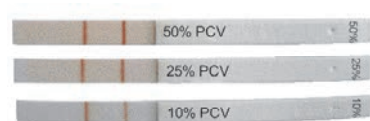


RELIABLE IN CASE OF AUTO-AGGLUTINATION



Thanks to our specific membrane technology, the agglutinated red blood cells (RBCs) will be retained at the bottom of the membrane whereas non agglutinated RBCs will carry on migrating until the top of the membrane.

RELIABLE IN CASE OF LOW PCV (ANEMIA)



Thanks to the sensitivity of our specific monoclonal antibodies, even a low pcv will allow you to obtain a reliable blood typing.

Also available in LAB TEST version

PRODUCT NAME	PRODUCT CODE	PACKAGING
QuickTest BT Canine	QT-BT-C	1 individual test
LabTest BT Canine	LT-BT-C	20 tests/tube
QuickTest BT Feline	QT-BT-F	1 individual test
LabTest BT Feline	LT-BT-F	20 tests/tube

QuickTEST *DAT* TECHNOLOGY

FOR CANINE **DIRECT ANTIGLOBULIN TEST (DAT)**
[COOMBS TEST]



THE FIRST DAT IMMUNO-CHROMATOGRAPHY TECHNIQUE
WITH A SPECIFIC CANINE ANTI-GLOBULIN REAGENT

BENEFITS

- 10 minutes procedure
- All material included
- Time saving
- Easy handling
- Reliable results
- Easy interpretation
- Snap result

IMPORTANCE OF DIRECT ANTIGLOBULIN TEST

A Coombs Test or Direct Antiglobulin Test (DAT) 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.

OUR TECHNOLOGY

Direct Antiglobulin Test (DAT) aims to detect the presence of immunoglobulins and/or C3 components on the surface of patient's red blood cells (RBCs).

The classical technology uses incubation of washed red blood cells suspension with antisera that will cause agglutination. Our immuno-chromatographic technology will detect the presence of immunoglobulin (IgG & IgM) and/or C3 components binding to the RBC surface. A positive result indicates an in vivo sensitization and can thus be used to indicate the presence of auto-immune antibodies.



EXAMPLES OF OUR CANINE QUICK TEST DAT RESULTS

Quick TEST DAT

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Quick TEST DAT



CLINICAL DAT INFORMATION

A positive DAT is the cornerstone to establish the IMHA diagnosis. In a dog suffering from anemia it is mandatory to perform a DAT as illustrated by the following cases:

CLINICAL CASE N°1	CLINICAL CASE N°2
<p>Name of patient: Vanda Symptoms: Weakness, Lethargy, Pale Mucous membranes, Anorexia. Biology: Anemia (PCV: 6,5%, Hb: 4,4g/L) DAT: POSITIVE</p>  <p>Cause: IMHA</p>	<p>Name of patient: Benji Symptoms: Weakness, Lethargy, Small haematomas, Haematuria. Biology: Anemia (PCV: 13,7%, Hb: 4,5g/L) DAT: NEGATIVE</p>  <p>Cause: Haemostasis disorder</p>

Also available in LAB TEST version

PRODUCT NAME	PRODUCT CODE	PACKAGING
QuickTest DAT Canine	QT-DAT-C	1 individual test
LabTest DAT Canine	LT-DAT-C	10 tests/tube

LabTEST^{XM} TECHNOLOGY

THE FIRST CANINE CROSSMATCH TEST

Also available in INDIVIDUAL
QUICK TEST version



THE FIRST XM IMMUNO-CHROMATOGRAPHY TECHNIQUE WITH A SPECIFIC CANINE ANTI-GLOBULIN REAGENT

BENEFITS

- 20 minutes procedure
- All material included
- Time saving
- Easy handling
- Reliable results
- Easy interpretation
- Snap result

IMPORTANCE OF CANINE CROSSMATCH TEST

Dogs have many blood types on the surface of their red blood cells and with the absence of test kits for all of these blood groups (except for DEA 1) , it is mandatory to perform a reliable crossmatch test before any transfusion.

Crossmatching aims to establish a serological compatibility between the recipient and the donor. The classical technology uses an agglutination reaction to detect alloantibodies produced after a previous transfusion.

OUR TECHNOLOGY

Our canine crossmatch test (minor and/or major) is based on an immuno-chromatographic technology that will detect the presence of immunoglobulins and/or C3 components binding to the red blood cells (RBCs) surface.

Our canine crossmatch test will allow you to pick up incompatibilities across all canine blood groups (DEA 1, 3, 4, 5, 7, DAL ...).

A positive result between donor RBCs and recipient serum/plasma will indicate the presence of alloantibodies in pre-transfusion compatibility testing.



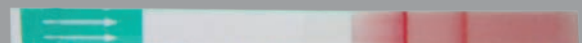
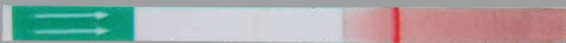
EXAMPLES OF OUR CANINE CROSSMATCH TEST RESULTS

LabTEST XM

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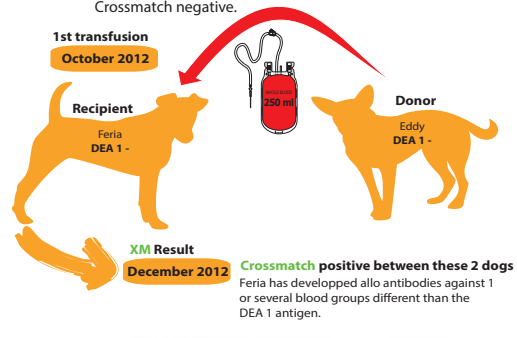
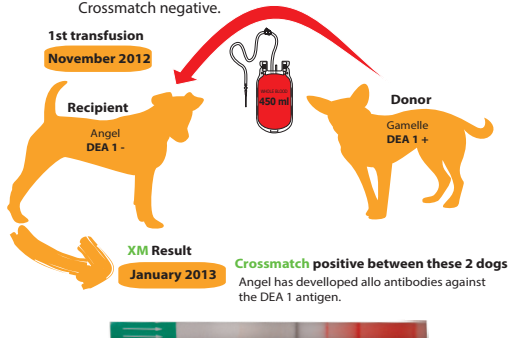
LabTEST XM

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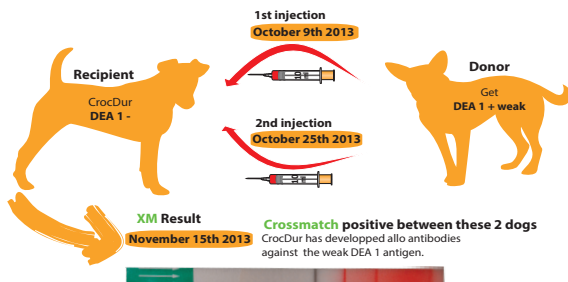
CLINICAL CASES:

CASE N°1 Crossmatch between donor and recipient was done before transfusion. Crossmatch negative. **CASE N°2** Crossmatch between donor and recipient was done before transfusion. Crossmatch negative.



CASE N°3

THE WEAK DEA 1 PHENOTYPE HAS TO BE CONSIDERED AS A TRUE DEA 1 POSITIF BLOOD GROUP.
EXPERIMENTAL DATA SHOW THAT THE WEAK DEA 1 PHENOTYPE INDUCES STRONG ANTI DEA 1 ALLO ANTIBODIES AFTER TRANSFUSION.



PRODUCT NAME

LabTest XM Canine

QuickTest XM Canine

PRODUCT CODE

LT-XM-C

QT-XM-C

PACKAGING

5 tests/tube

1 individual test

LabTEST_{Ca} TECHNOLOGY

THE FIRST EQUINE BLOOD TYPING TEST



THE FIRST BT IMMUNO-CHROMATOGRAPHY TECHNIQUE WITH A SPECIFIC EQUINE ANTI-Ca MONOCLONAL ANTIBODY

BENEFITS

- Stall-side-test
- 2 minutes procedure
- Easy handling
- Reliable results
- Easy interpretation
- 100% specificity

IMPORTANCE OF BLOOD TYPING

In horses there are 7 blood group systems (A,C,D,K,P,Q,U) with greater than 30 red blood cell factors. Of these, Ca seems to be one of the most immunogenic antigens (causing allo-immunization).

- Transfusion reactions

Blood typing before transfusion minimizes the risk of transfusion reactions and prevent immunization of the recipient against incompatible RBC antigens. Ca, Aa and Qa antigens are clinically important for their role in transfusion reactions.

- Neonatal isoerythrolysis (NI)

NI is a potentially fatal condition in new foals that result from an incompatibility of blood types between the mare and the foal. It is caused when the mare produces antibodies against the foal RBC and transfers those antibodies through colostrum.

OUR TECHNOLOGY

The system is based on the migration of red blood cells (RBC) on a membrane:

- A monoclonal antibody specific to Ca antigen has been incorporated on the membrane. This antibody will retain Ca positive RBC. A positive result is characterized by the presence of a red line in front of the Ca line.
- A monoclonal antibody specific to the equine glycoporphin has been incorporated on the membrane. The control line must be positive ensuring that the test has run successfully.



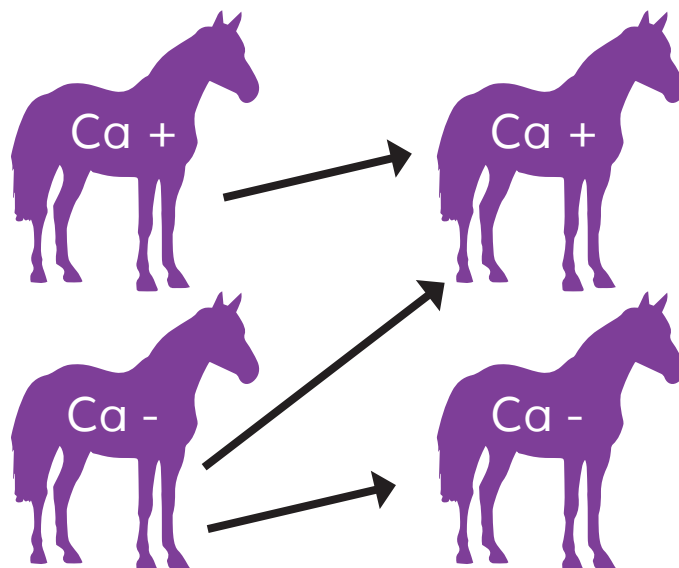
EXAMPLES OF OUR EQUINE BLOOD TYPING TEST RESULTS



Ca BLOOD GROUP COMPATIBILITY

Donor

Recipient



Always perform blood typing & crossmatching for a safe transfusion.

PRODUCT NAME
LabTest Ca Equine

PRODUCT CODE
LT-Ca-E

PACKAGING
10 tests/tube

DO NOT HESITATE TO CONTACT US

- To order
- For price list
- For further information
- To identify your local distributor

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