

# BLOOD CROSS MATCH TEST

## (Canine)

### SAMPLE REQUIRED:

EDTA blood (2.0 mL) and serum (2 ml) from the recipient and each donor

### BLOOD TUBE REQUIRED:

EDTA (purple top) tube  
Plain (red top) tube

### Test Use

Cross-matching is used prior to a blood transfusion in order to determine if the donor's blood is compatible with the blood of an intended recipient. An incompatible cross match usually indicates prior sensitisation (and hence antibody formation), except in the cat which has naturally occurring antibodies.

The major cross match tests erythrocytes of the donor against the serum or plasma of the recipient. This allows detection of antibodies in the recipient which will react with donor erythrocytes. Major cross match incompatibilities may result in life-threatening transfusion reactions if that blood is transfused into the recipient.

The minor cross match tests serum or plasma of the donor against erythrocytes of the recipient. This detects the presence of antibody in the donor blood which may react with the recipient erythrocytes. Minor cross-match incompatibilities are usually not life threatening due to marked dilution of the donor antibodies following transfusion.

### Protocol

- Take care to avoid or minimise any haemolysis during sample collection, as this can invalidate results.
- Recipient: Collect 2 mL of blood into an EDTA tube and 2 mL of blood into a plain serum tube
- Donor/s: Collect 2 mL of blood into an EDTA tube and 2 mL of blood into a plain serum tube
- Refrigerate samples until transport to the laboratory

### Notes

- Ensure EDTA tubes are filled to the correct level (line on tube)
- Agglutination or haemolysis may interfere with results.