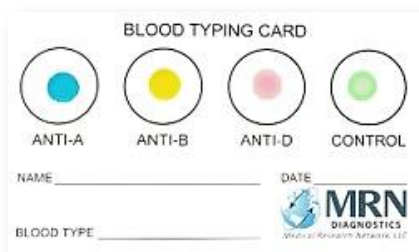


MRN Diagnostics Blood Typing Kit



The MRN diagnostics Blood Typing Test is used for the identification of the A, B, O, and Rh (rhesus) antigens on human red blood cells. Almost everyone can be assigned to one of the four ABO blood groups. These blood groups result from the presence or absence of two antigens, A and B, which act as cell identifiers on the membrane of red blood cells. In addition to these antigens, Rh is another blood identifier. Individuals are either classified as Rh-positive or Rh-negative, depending on whether their blood cells clump (also known as agglutination) when mixed with the anti-Rh (Anti-D). Both

ABO and Rh have medical significance, so both are used in designating a person's blood type (e.g. A+, A-). Only about 14% of the population in the United States is Rh-negative, making blood typing for transfusion and donation important. Overall, this test is based on blood group specific monoclonal antibodies that react with each blood type causing the red blood cells to agglutinate if positive. This test is for **Research Use Only**.

The card has four colored test spots that represent Anti-A (blue spot), Anti-B (yellow spot), Anti-D (Rh factor) (pink spot), and Negative Control (green spot).

Kit Contents:

1. Blood typing cards in resealable foil pouch with desiccant
2. 1 Dropper bottle to be filled with tap or distilled water
3. MRNDx Blood sticks (single use)
4. Isopropyl Prep Pads
5. Pressure Activated Lancets
6. Blood Typing Kit Package insert
7. Band-Aids

You Will Need:

1. Cotton Swabs (4 per card)

Procedure:

1. Remove test cards from foil pouch and place on a flat surface.
2. Remove the dropper bottle cap, fill the dropper bottle with either tap or distilled water, and snap the dropper bottle cap back onto the top of the bottle.
3. Add one free falling drop of water to each of the four spots (Anti-A, Anti-B, Anti-D, and Negative Control) on the card and wait about 1 minute for the solutions to rehydrate.
4. Use the isopropyl prep pad to disinfect the desired finger and allow to air dry.
5. Twist and pull the pin from the lancet to remove. Hold the lancet firmly against your cleaned finger and press the button to activate the needle. Squeeze the tip of your finger to promote a blood droplet.
6. Collect a drop of blood from the finger using the MRNDx blood stick and transfer it to the Anti-A (blue) spot. Swirl the stick in circles to mix the blood with the antibody solution. Repeat for the Anti-B (yellow), Anti-D (pink), and Negative Control (green) spots. Be sure to use a new blood stick for each spot.
7. Hold the card with both hands and rock it gently back and forth 10-15 times. Keep the solutions in their respective circles to avoid contamination.
8. Using a cotton swab, gently touch the surface of each liquid spot and absorb the excess liquid that may be obscuring any agglutination.
9. Read spots immediately and determine blood type based on which spots have agglutinated (positive). Use the photos on the back of this insert as a reference.
 - a. If agglutination is observed in the control spot the test is invalid.

MRN Diagnostics
101 Constitution Blvd., Franklin, MA 02038

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Expected Agglutination Reactions

BLOOD TYPING CARD			
			
ANTI-A	ANTI-B	ANTI-D	CONTROL
NAME _____		DATE _____	
BLOOD TYPE <u>O+</u>			

BLOOD TYPING CARD			
			
ANTI-A	ANTI-B	ANTI-D	CONTROL
NAME _____		DATE _____	
BLOOD TYPE <u>A+</u>			

BLOOD TYPING CARD			
			
ANTI-A	ANTI-B	ANTI-D	CONTROL
NAME _____		DATE _____	
BLOOD TYPE <u>B+</u>			

BLOOD TYPING CARD			
			
ANTI-A	ANTI-B	ANTI-D	CONTROL
NAME _____		DATE _____	
BLOOD TYPE <u>AB+</u>			

BLOOD TYPING CARD			
			
ANTI-A	ANTI-B	ANTI-D	CONTROL
NAME _____		DATE _____	
BLOOD TYPE <u>AB-</u>			

Storage:

The card is provided in a moisture proof foil pouch that is stable at 2-30°C for 1 year. Once opened only remove the cards needed for testing that day and then reseal the bag. Once the pouch is opened the cards may be used for up to 30 days.

WARNING:

Not for screening purposes prior to transfusion. Never use the result of this test as the basis for medical treatment. Consult your doctor before making any decisions based on this test.

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Doc #: MDX-CUS-PKI-005, Rev: 003, 08/2024