

Aim:

To determine the self blood group.

Reference:

Human Anatomy and physiology by NN Yalagyaswamy, CBS Publishers, fourth edition, Page No:- 136-138.

Requirement:

Monoclonal antibodies A, B and D, Glass slides, lancets, spirit, cotton etc.

Theory:

A blood type (also known as a blood group) is a classification of blood, based on the presence and absence of antibodies and inherited antigenic substances on the surface of red blood cells (RBCs). These antigens may be proteins, carbohydrates, glycoproteins, or glycolipids, depending on the blood group system. Some of these antigens are also present on the surface of other types of cells of various tissues. Several of these red blood cell surface antigens can stem from one allele (or an alternative version of a gene) and collectively form a blood group system.

Procedure :

- First take a glass slide and mark three circles on it after cleaning the slide.
- Unpack the Monoclonal Antibodies (MAB) kit. Now with the help of a dropper, add the Anti-A, Anti-B and Anti-D in the first, second and third circle respectively in a sequential order.
- Keep the slide aside safely without disturbing.
- Now you need to wipe the ring finger with the alcohol swabs and rub gently near the fingertip, where the blood sample will be collected.
- You need to prick the ring fingertip with the lancet and wipe off the first drop of the blood.
- As blood starts flowing out, allow it to fall on the three circles of the glass slide by gently pressing the fingertip.
- We must apply pressure on the pricked part in order to stop the blood flow. Use the cotton ball if required.
- Mix the blood sample gently with the help of a toothpick and wait for a minute to observe the result.

Conclusion

Here is the chart which predicts the various sorts of blood groups alongside its rhesus factor.

Various Sorts of Blood Groups Alongside Its Rhesus Factor.

Blood type	A	B	O	AB
Rh-positive	A+	B+	O+	AB+
Rh-negative	A-	B-	O-	AB-

Result :

My blood group is _____.