

## KNOW YOUR BLOOD TYPE



### ELDON BLOOD TYPING KIT

For self-testing of ABO and RhD blood groups

✓ Easy ✓ Fast ✓ Reliable

# WHY KNOWING YOUR BLOOD TYPE MATTERS

The importance of blood types and the convenience of the EldonCard™

## Know Your Blood Type

Knowing your blood type can help you understand your health better; it is also needed for blood donations and important for safe pregnancies. Most critically, it could save your life if you need an emergency blood transfusion. You can learn your blood type in just a couple of minutes using the EldonCard™. Read more below.

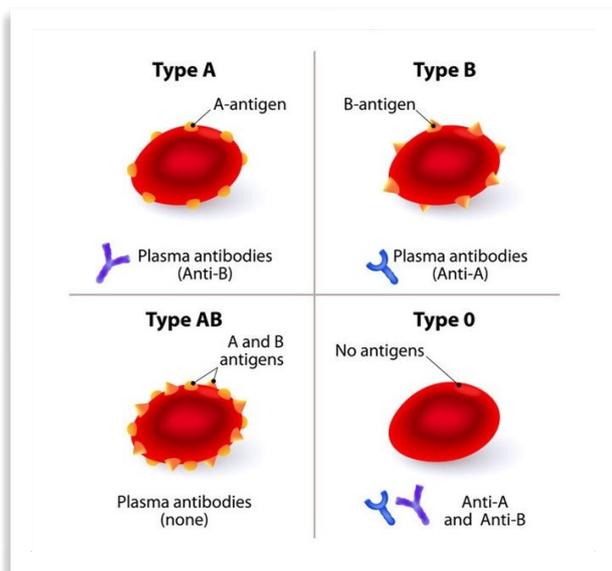
## Understanding Blood Types

All blood consists of plasma, red and white blood cells and platelets. Your blood type is inherited from your parents and determined by the presence or absence of certain antigens and antibodies.

The *antigens* are protein markers present on the surface of red blood cells, while antibodies are produced in the plasma or liquid portion of the blood. The type of *antigen* you have tells us what your blood type is. Depending on the antigen on the red blood cells the blood type is classified by two elements: The **ABO** grouping system and the **Rhesus (Rh)** factor which is either present (Rh positive) or not present (Rh negative). For example, if you have A antigens on your red blood cells, your blood type is A. If someone has both A and B antigens, they are type AB. If you do not have any antigens on the surface of red blood cells, your blood type is O. For each antigen on the blood cell, the opposite antibody is produced in the plasma. For example, type B blood has anti-type A antibodies.

Receiving blood that's incompatible with one's own blood type may trigger a serious immune response that can be fatal. While there are more than 20 blood-type systems, ABO and Rh are by far the most important.

## There are 8 Blood Groups With the ABO, Rh System



- ❖ **O negative** - Does not have any A or B antigens or the Rh factor.
- ❖ **O positive** - Doesn't have any A or B antigens, but it does have the Rh factor.
- ❖ **A negative** - Only consists of the A antigen on the surface of the red blood cells (RBCs).
- ❖ **A positive** - Consists of the A antigen on the RBCs and the Rh factor. It does not have the B antigen.
- ❖ **B negative** - Consists of the B antigen on RBCs only.
- ❖ **B positive** - Consists of the B antigen as well as the Rh factor. This blood type does not have the A antigen present on the RBC surface.
- ❖ **AB negative** - Consists of the A and B antigens, but not the Rh factor.
- ❖ **AB positive** - Consists of all three types of markers; the A, B antigens and the Rh factor.



# A Number of Conditions are Related to Specific Blood Types:

## Receiving a blood transfusion

If you need a blood transfusion following an accident, surgery or delivery, you'll need compatible blood. Blood antigens can trigger an immune response if they are foreign to your body, meaning an incorrect mix of blood can clump dangerously inside

your veins and may be fatal. The EldonCard allows for "bed-side" testing on the spot making certain no mixup has occurred and that the patient is given correctly matched blood.

## Blood donation - know your donor type

One of the best reasons to know your blood type is the opportunity donate to patients in need; typically trauma and cancer patients, newborns and emergency transfusions during birth, people with anemia, and anyone suffering severe blood loss. Blood Services are constantly looking for blood donors of specific blood types. Ideally, blood transfusions are done with

donated blood that's an exact match for both type and Rh factor. However: Blood type AB-positive is the universal recipient and can receive blood from all types despite only being able to donate to other AB types. Blood type O is commonly known as the universal donor because of its ability to supply red blood cells to nearly any recipient and is, therefore, in high demand.

## Pregnancy and the Rhesus factor

If the blood of a pregnant women who is Rhesus-negative (Rh-) mixes with the blood of a baby who is Rhesus-positive (Rh+), it can lead to a condition known as Rh-incompatibility. This may trigger the mother's blood to produce antibodies that attack the baby's blood. To avoid this risk,

pregnant women's blood type is always checked early in pregnancy. If she is Rh-negative, she receives a shot of immunoglobulin which prevents antibody production and sensitization, keeping the baby and mother safe.

## Relation to medical and other conditions

Some blood types are linked to higher risk of certain medical conditions: Type AB, A and B are at higher risk of developing cardiovascular complications such as heart disease, blood clots (thrombosis), and stroke. Types A, B, and AB are up to 82 percent more likely to develop cognition and memory problems

compared to those with Type O. Recently, several studies have confirmed the potential association between blood group A and risk of SARS-CoV-2, Corona virus infection and complications from the disease: Covid-19. Studies suggest that people with blood type O may have a lower risk of complications from Covid-19.

## The EldonCard

FDA CE

With more than 40 years of continuous development today's EldonCard is based on the use of special formulations of selected monoclonal antibodies. The EldonCard has been validated by the FDA in the USA and the European Union (CE approval).

The EldonCard is the most trusted and accurate diagnostic tool for point-of-care (near-patient-testing) and home-testing of blood typing of the ABO-, and Rhesus systems. Unlike other devices, once the test is complete, you have the option of preserving the result for your records in a convenient credit card format.

Displaying the *actual agglutination reaction* (the clumping together of the red blood cells) your blood type can be confirmed and read by any health personel at any time in he future.

### Unique properties:

- ✓ Shelf-life of 24 months at 5-37°C (40-99°F)
- ✓ Superior accuracy
- ✓ 2 minute blood group determination on location
- ✓ Portable, compact
- ✓ Easy to perform test
- ✓ Permanent record
- ✓ Uses whole blood (finger prick drop)
- ✓ ID-card option
- ✓ Minimal environmental impact

