



What's so special about Ro blood?

Your guide to blood component donation

What is Ro?

Ro is an extremely rare subtype of blood containing a particular combination of genes. Only 3% of donors have the Ro subtype, but it is perfectly normal and does not affect your blood or how it works.

Ro is a subtype of the Rh blood group system, which involves the RHD and RHCE genes that make your blood positive or negative.

<p>The RHCE gene has four possible variations: ce, Ce, cE or CE.</p>	<table border="1"> <tr> <td>Dce</td> <td>DCE</td> <td>DcE</td> <td>DCE</td> <td>dce</td> <td>dCe</td> <td>dcE</td> <td>dCE</td> </tr> </table>	Dce	DCE	DcE	DCE	dce	dCe	dcE	dCE
Dce	DCE	DcE	DCE	dce	dCe	dcE	dCE		
<p>When the RHD and RHCE genes are combined there are eight possible subtypes – one of which is called Ro.</p>	<table border="1"> <tr> <td>R₀</td> <td>R₁</td> <td>R₂</td> <td>R_z</td> <td>r</td> <td>r'</td> <td>r''</td> <td>R_y</td> </tr> </table>	R ₀	R ₁	R ₂	R _z	r	r'	r''	R _y
R ₀	R ₁	R ₂	R _z	r	r'	r''	R _y		

Why are Ro donors so important?

The demand for Ro blood is increasing so we need more regular donors with the Ro subtype.

With some medical conditions, patients require regular multiple blood transfusions, sometimes for the rest of their lives. These patients need to receive blood that is more closely matched to their own.

Sickle cell

One example of a need for regular, ongoing transfusions is the management of sickle cell disorder – a group of inherited blood conditions that affect red blood cells. There are approximately 15,000 people in the UK living with sickle cell.

Ro blood is vital in treating sickle cell because many people with sickle cell have the Ro subtype.

Who needs Ro blood?



Miai

"Before the donated blood she is usually quiet, withdrawn, and weak. Within the hour she starts to get her zany personality back. She's much more energetic, cheeky and engages in banter with hospital staff.

"It's because of blood donors Miai can lead a 'normal' life and there really is nothing that she cannot do.

"For those who can and are willing to donate blood, or if you're a regular donor, please be reassured that each bag of blood gives hope not only to the patient receiving it but to their loved ones too. It's an invaluable lifeline donated by real life superheroes." *Miai's mum*



Chanel

"The benefits from the exchange transfusion have significantly enhanced my quality of life. My relationship with my daughter has also really improved. I'm able to instil structure in my life and have a better routine.

"I receive 7 units every 5 weeks and if it wasn't for the donors, I wouldn't be here today. I'm able to be a role model to my child and for that, I'm extremely grateful." *Chanel*



Calvin

"Having regular exchange transfusions is incredibly important to me, as it reduces the time I'm in hospital. Before the exchange programme I was spending an average of seven to eight months a year as an inpatient and frankly had no social life.

"Until my daughter was six, she didn't realise that I lived in the same house as her because I was always in hospital and she thought that was where I lived." *Calvin*

Priority appointments:

Your donation is important and valued.

We can offer you priority bookings to help make donating quicker and more convenient. To book your next appointment, call our dedicated Ro priority line: **0300 303 2737**

Men can give blood every 12 weeks and women can give blood every 16 weeks.

To find out more about giving blood, visit [blood.co.uk](https://www.blood.co.uk)