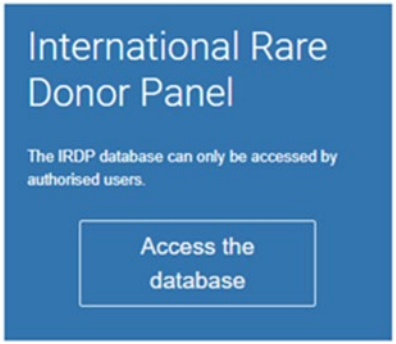


Rare Donor Program

Country: SINGAPORE

Country/Region:

Rare Donor Program	
Rare Donor Program	*Yes*
National Regional or Facility based	National
Number of Rare Donors	111
Definition of Rare	<1 in 1000 donors
Are the donors listed in the International Rare Donor Panel	Yes
Frozen Inventory	Yes
How are Rare Donors found	Phenotyping of blood donors
Number of Rare Donor Units used per year	2 (2022)
ISBT Rare Donor WP Blood Shipment form used	*No*
Outcome of incompatible transfusion form used	*No*
Most difficult types to find	Rh null, Di^{b}-, k-, U-,
Phenotypes confirmed by molecular testing	No

Country/Region:

Phenotype	Total Active Donors	Group O	O Positive	O Negative	Other ABO/Rh
GE:-2,-3	0				
Jk(a-b-)	106	44	44	0	62
Ko	0				
Kp(b-)	0				
MkMk	0				
Rh:-34	0				
U-	0				
PP1Pk-	0				
SC:-1	0				
En(a-)	0				
At(a-)	0				
Di(b-)	0				
Jr(a-)	0				
Rh null	0				
Vel(-)	0				
D--	1	0	0	0	1 (B pos)
Oh	2	0	1	1	

Country/Region: SINGAPORE
How are your rare donors found?

	Yes / No	Method	Comments
Extended phenotyping donors	Yes	Using serological methods	
Extended genotyping donors	No		
Family studies	Yes	Using serological methods	
Antibody investigations	Yes	Red cell antibody screening (using gel column agglutination test system) for all donations. If positive on screening, antibody identification (mostly using gel column agglutination tests)	
Other			

Red Cell Product Specifications

Country: SINGAPORE

Country/Region

Donor Selection

Donation	Voluntary
Age or Weight Restrictions	Weight: 45-49 kg (350 ml) / 50kg and above (450 ml) Age for 1st time donor : 16-17 for whole blood donation (with parental consent) 18 years old (Whole blood and apheresis) Maximum age: up to 75 years old (provided additional health screening criteria are met in those above 65 years old)
Donation Interval	Whole blood: 12 weeks Apheresis: 4 weeks
Sexual Activity Precautions	Positive for HIV (permanent deferral) or other sexually transmitted diseases (12-months deferral) Male to Male sex (permanent deferral) Sex worker (permanent deferral) or paid for sex (12-months deferral) Sex with more than one partner (12-months deferral) Sex with someone known for less than 3 months (12-months deferral)
	Sex with someone who has the above sexual risk factors (12-months deferral)
	Sex with someone who has Zika infection in the last 6 months (4-weeks deferral)
Travel Exclusions **If donor has returned from an area endemic for the listed infectious illnesses**	Return from Malaria endemic area < 4 months
	Return from West Nile Virus endemic areas < 28 days
	Chagas Disease risk (lived in an endemic area for ≥ 28 days)
Lifestyle	Acupuncture, piercing or tattoo (Accept if performed using single use disposable sterile needles. Otherwise 12-months deferral.)
	Taken addictive drugs (Permanent deferral)
	Incarceration (12-months deferral)
CJD restrictions	Currently in the process of removing geographical deferral for vCJD risk Permanent deferral for donors 1. who have been diagnosed with vCJD or any other form of CJD. 2. Recipient of a dura mater transplant and cornea 3. Prior injection of human cadaveric pituitary-derived growth hormone. 4. Donors with one or more blood relatives diagnosed with CJD
Covid restrictions	COVID19 vaccine administration (If no side effects, 7 days for mRNA and other inactivated vaccines, and 4 weeks for viral-vector based vaccines)

Country/Region: SINGAPORE

Mandatory Infectious Diseases Screening of Blood Products		
	Screening test	**Risk of blood transfusion transmission**
HIV	HIV Antigen/Antibody Combo HIV NAT (ID)	Residual risk: 0.54 per 1 million donations (95% CI: 0.23, 1.06); The method used was the Incidence Rate-Window Period (I-WP) model
HCV	Anti-HCV HCV NAT (ID)	Residual risk: 0.22 per 1 million donations (95% CI: 0.08, 0.41); The method used was the Incidence Rate-Window Period (I-WP) model
HBV	HBsAg HBV NAT (ID)	Residual risk: 6.61 per 1 million donations (95% CI: 4.19, 9.91); The method used was the Incidence Rate-Window Period (I-WP) model
Syphilis	TPPA	
HTLV (1 & 2)	NA	
CMV	NA	
Zika Virus	NA	
West Nile Virus	NA	
Babesia	NA	
Trypanosoma cruzi (T. cruzi) Chagas Disease	NA	
HEV	HEV NAT (ID)	

Provides details of antibody and nucleic acid testing
Mark tests as NA when not required
Include details of any additional testing required

Country/Region: SINGAPORE

Red Cell Blood Product	
Description	Whole blood derived buffy coat removed red Cell concentrate
Anticoagulant	CPD
Additive Solution	SAG-M
Leukofiltration	Available (Pre-storage)
Average volume	280ml
Storage Temperature	1-6^{o}C
Transport Temperature	1-10^{o}C
Storage Duration	42 days
Irradiation Policy	Original expiration or 28 days from date of irradiation, whichever is sooner
Other	

Frozen Inventory

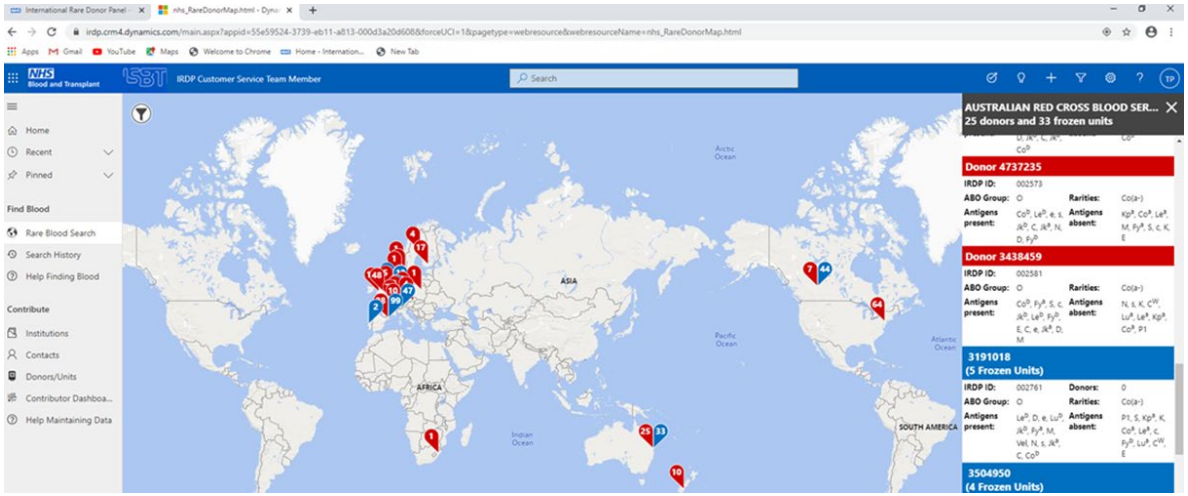
Country: SINGAPORE

Country/Region: SINGAPORE

General Information	
Freezing Method	High concentration glycerol technique (40%)
Frozen Expiry (years)	10 years
Storage Temperature	-65ºC or colder
Can inventory be issued and sent frozen	No
Thawing Method	Deglycerolisation using Haemonetics ACP 215
Thawed Expiry (days)	1 day (units frozen using open system) 14 days (units with AS-3 additive solution - closed system)
Additive Solution	AS-3 solution (for 14 days expiry)
Irradiation Policy	1 day (units frozen using open system) 14 days (units with AS-3 additive solution - closed system)
IUT and Neonate use	Yes
Supply out of date Policy	No

Country/Region:

Product Specifications	
Volume	Ave 300ml
Supernatant Haemoglobin	<0.2 g/unit
Haematocrit	NOT DONE
Haemoglobin	>36g (Total)
Osmolarity	Osmolality =<400 mOsm/kg
Residual leucocyte content	<1.0 x10^9/unit
Sterility	NOT DONE
Other	Red cell recovery >=80%



Ordering and Shipping

Country: SINGAPORE

Country/Region: SINGAPORE

Exporting	
Request form available	No
Government Requirements	No specific requirements that we are aware of. (The Human Organ Transplant Act prohibits the buying or selling of organs and blood, or advertisements related to these activities.)
Regulatory Requirements	No specific requirements that we are aware of. (The Human Organ Transplant Act prohibits the buying or selling of organs and blood, or advertisements related to these activities.)
Rare Donor Program Requirements	Strong preference for liasing with the National Blood Service (or equivalent) of the requesting country to confirm that the required rare blood is unavailable in that country before exporting rare blood to them.
Other	Requesting country blood service is responsible for shipping arrangement and custom clearance

Country/Region: SINGAPORE

Importing	
Government Requirements	No specific requirements that we are aware of. The blood service is responsible in ensuring that the imported rare blood meets similar standards and regulatory requirements stipulated for blood collected locally. The Human Organ Transplant Act prohibits the buying or selling of organs and blood, or advertisements related to these activities.
Regulatory Requirements	As above
Rare Donor Program Requirements	
Other	