



## International Rare Donor Panel

The IRDP database can only be accessed by authorised users.

[Access the database](#)



# Rare Donor Program

## Country: Canada

## Country/Region: Canada

### Rare Donor Program

<b>Rare Donor Program</b>	Yes
<b>National Regional or Facility based</b>	National
<b>Number of Rare Donors</b>	67 corresponding to phenotypes listed on slide 3; 202 donors negative for high prevalence antigens and 1300 donors including those who are rare due to a combination of antigens
<b>Definition of Rare</b>	< 1:1000
<b>Are the donors listed in the International Rare Donor Panel</b>	Yes
<b>Frozen Inventory</b>	Yes
<b>How are Rare Donors found</b>	donor and patient phenotyping and genotyping; family member testing; patient or donor antibody ID
<b>Number of Rare Donor Units used per year</b>	27
<b>ISBT Rare Donor WP Blood Shipment form used</b>	<i>no</i>
<b>Outcome of incompatible transfusion form used</b>	Yes
<b>Most difficult types to find</b>	Kpb; Rh variants; combinations of negative for HPA and also anti D or anti Jka/Fyb
<b>Phenotypes confirmed by molecular testing</b>	Yes

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Phenotype	Total Active Donors	Group O	O Positive	O Negative	Other ABO/Rh
GE:-2,-3	2	1	1	0	2
JK(a-b-)	6	4	4	0	2
Ko	0	0	0	0	0
Kp(b-)	3	1	1	0	2
MkMk	0	0	0	0	0
Rh:-34	10	4	3	1	6
U-	23	16	14	2	7
PP1Pk-	3	3	2	1	0
SC:-1	0	0	0	0	0
En(a-)	2	2	2	0	0
At(a-)	0	0	0	0	0
Di(b-)	1	0	0	0	1
Jr(a-)	2	2	2	0	0
Rh null	0	0	0	0	0
Vel(-)	6	4	3	1	2
D--	2	0	0	0	2
Oh	7	7	6	1	0

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### How are your rare donors found?

	Yes / No	Method	Comments
<b>Extended phenotyping donors</b>	Yes	Immucor Neo Iris and supplemental manual typing	Confirmed with genotype
<b>Extended genotyping donors</b>	Yes	Progenika Core XT	Limited throughput; some confirmed with NGS
<b>Family studies</b>	Yes		We send letters for family of all new rare donors and patients
<b>Antibody investigations</b>	Yes	Many including SIAT; MTS Gel, plus or minus enzyme treatments and enhancements	
<b>Other</b>			



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# Red Cell Product Specifications

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### Donor Selection

<b>Donation</b>	Voluntary	
<b>Age or Weight Restrictions</b>	Minimum age of 17 with no upper limit. Weight requirement of 50 kg or higher.	
<b>Donation Interval</b>	56 days for donors registered as male; 84 days for donors registered as female	
<b>Sexual Activity Precautions</b>	Positive for HIV, Hepatitis B/C, or HTLV	Indefinite deferral
	Male to male sex	For all donors regardless of gender, they are deferred for 3 months only if they have engaged in anal sex AND have had multiple partners or new partners in the past 3 months.
		No specific deferral related to gender and sexual activity.
	Sex worker or contact with sex worker	12 month deferral
<b>Travel Exclusions If donor has returned from an area endemic for the listed infectious illnesses</b>	Dengue	No specific criteria. Would likely be captured by malaria travel criteria, or our general 21 day deferral for travel outside of US/Canada and Europe
	Ebola	No specific criteria. Would likely be captured by malaria travel criteria, or our general 21 day deferral for travel outside of US/Canada and Europe
	Malaria	3 months deferral if visit was less than 6 months 3 year deferral if visit was more than 6 months
	West Nile Virus	No specific criteria. We perform seasonal WNV NAT testing
<b>Lifestyle</b>	Acupuncture, piercing or tattoo	No deferral if single disposable needle used for acupuncture; 3 month deferral otherwise. 3 month deferral for piercing and tattoo
	Drug use (Non-prescribed injected)	Indefinite deferral
	Incarceration	12 month deferral if incarcerated for more than 48 hours
<b>CJD restrictions</b>	Indefinite deferral if donor has spent: a) more than 3 cumulative months in the UK from 1980 to 1996; or b) more than 5 cumulative years in France or Ireland from 1980 to 2001.	
<b>Covid restrictions</b>	COVID19 vaccine administration	No deferral
	COVID infection	14 day deferral from positive test (if asymp) or from recovery (if symptomatic). 21 day deferral if hospitalized
	Household contact	14 day deferral from positive test (if case is asymp) or full recovery of case

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Mandatory Infectious Diseases Screening of Blood Products		
	Screening test	Risk of blood transfusion transmission
<b>HIV</b>	Anti-HIV-1/2 and HIV-1 p24 assay; HIV NAT	1 in 21.4 million
<b>HCV</b>	Anti-HCV; HCV NAT	1 in 12.6 million
<b>HBV</b>	HBsAg, Anti-HBCore, HBV NAT	1 in 7.5 million
<b>Syphilis</b>	Micro-hemagglutination assay	N/A
<b>HTLV (1 &amp; 2)</b>	Anti-HTLV 1/2	1 in 619 million
<b>CMV</b>	Anti-CMV	N/A
<b>Zika Virus</b>	Not performed	N/A
<b>West Nile Virus</b>	WNV NAT (performed seasonally)	N/A
<b>Babesia</b>	Not performed	N/A
<b>Trypanosoma cruzi (T. cruzi) Chagas Disease</b>	Anti-T. Cruzi in donors with identified risk factors	N/A

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### Red Cell Blood Product

<b>Description</b>	Prepared from 480 mL whole blood collection in 70 mL CPD anticoagulant; Leukoreduced
<b>Anticoagulant</b>	CPD
<b>Additive Solution</b>	SAGM
<b>Leukofiltration</b>	Yes
<b>Average volume</b>	287 mL
<b>Storage Temperature</b>	1-6 C
<b>Transport Temperature</b>	1-6 C
<b>Storage Duration</b>	42 days
<b>Irradiation Policy</b>	National Advisory Committee Irradiation Guidelines: <a href="https://nacblood.ca/">https://nacblood.ca/</a> Expires 14 days post irradiation or 28 days post collection, whichever occurs first
<b>Other</b>	





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# Frozen Inventory

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### General Information

<b>Freezing Method</b>	Glycerol added to unit and frozen within 21 days of collection. ACP-215
<b>Frozen Expiry (years)</b>	10 years, but can be extended for another 20 years (for 30 year total expiry)
<b>Storage Temperature</b>	-80 C
<b>Can inventory be issued and sent frozen</b>	No
<b>Thawing Method</b>	ACP-215
<b>Thawed Expiry (days)</b>	14 days
<b>Additive Solution</b>	AS-3
<b>Irradiation Policy</b>	Not required
<b>IUT and Neonate use</b>	Acceptable for use
<b>Supply out of date Policy</b>	N/A

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### Product Specifications

<b>Volume</b>	N/Ap
<b>Supernatant Haemoglobin</b>	N/Ap
<b>Haematocrit</b>	≤ 0.8 L/L
<b>Haemoglobin</b>	≥ 35 g/unit
<b>Osmolarity</b>	N/Ap
<b>Residual leucocyte content</b>	< 5 x 10 <sup>6</sup> /unit
<b>Sterility</b>	No growth
<b>Other</b>	Hemolysis: <0.8%

The screenshot displays the IRDP website interface. On the left is a navigation menu with options like Home, Recent, Pinned, Find Blood, Rare Blood Search, Search History, Help Finding Blood, Contribute, Institutions, Contacts, Donors/Units, Contributor Dashboards, and Help Maintaining Data. The main area features a world map with red and blue location pins. On the right, a detailed donor profile is shown for Donor 4737235, including their IRDP ID (002573), ABO Group (O), and various antigens present and absent. Below this, other donor profiles are partially visible, such as Donor 3438459 and Donor 3191018 (5 Frozen Units).



# Ordering and Shipping

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### Exporting

<b>Request form available</b>	No specific form; a phone call or email is followed by a list of questions
<b>Government Requirements</b>	N/A
<b>Regulatory Requirements</b>	N/A – any unit we would use in Canada could be exported – and is considered a prescription
<b>Rare Donor Program Requirements</b>	we must be able to ship and have the product arrive within an acceptable time and temperature;
<b>Other</b>	Each case involves medical consultation and is managed on a case by case basis.

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### Importing

<b>Government Requirements</b>	Imports of rare units are considered a prescription / medical practice
<b>Regulatory Requirements</b>	We require all donor unit specifications and test results (anticoagulant, additive, expiry and testing information)
<b>Rare Donor Program Requirements</b>	Most units imported to a single Production facility and then distributed onward in Canada; no specific program requirements
<b>Other</b>	