

NAPS CONSORTIUM

For REM Sleep Behavior Disorder

North American Prodromal Synucleinopathy (NAPS2)

&

The National Centralized Repository for Alzheimer's Disease and
Related Dementias (NCRAD)

Biofluids Collection Training Slides



National Centralized Repository for
Alzheimer's Disease and Related Dementias

Contact Information

- Questions?

Please contact NCRAD Coordinators at:

- Phone: 1-800-526-2839 or 317-278-1133
- E-mail: alzstudy@iu.edu or agericks@iu.edu
- Website: www.ncrad.org

Training Overview

- GUIDs
- Specimen Collection Schedule
- Kit Request Module
- Specimen Labels
- Handling/Processing Study Specimens
- Sample Shipping
- NCRAD Website
- Questions

Globally Unique Identifier (GUID)

- The GUID is a subject ID that allows researchers to share data specific to a study participant, without exposing personally identifiable information
- A GUID is made up of random alpha-numeric characters and does not include any PHI in the identifier

The GUID is required for NAPS2!

Globally Unique Identifier (GUID)

1. Create an account: <https://bricsguid.nia.nih.gov/portal/jsp/login.jsp>
2. Once you have an account, go to the GUID Tool – Create GUID
3. To open the ‘Launch GUID Tool’ you will need to have Java installed on your device
4. When the GUID Tool is open, you will need all of the following information
 - Complete legal given (first)name of participant at **birth**
 - The participant’s middle name, if applicable
 - Complete legal family (last) name of subject at **birth**
 - Day of birth
 - Month of birth
 - Year of birth
 - Name of city/municipality in which subject was born (Using an abbreviation for the name of the city matters and will result in 2 GUIDS for the same person (i.e. Saint Louis vs St. Louis, St. Paul vs Saint Paul) It is important to be consistent.
 - Country of birth

Specimen Collection Schedule

	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
Serum	X	X	X	X	X	X	X	X
Plasma	X	X	X	X	X	X	X	X
Buffy Coat	X	X	X	X	X	X	X	X
RNA	X	X	X	X	X	X	X	X
CSF*	X	X	X	X	X	X	X	X

*CSF collection highly encouraged for RBD group each cycle, but not mandatory. CSF collection is mandatory for Control group in Cycle 1 and optional in following cycles.

NAPS2 Update

Update Details

- Changing the size and number of Plasma and CSF aliquots
- Previously: Plasma & CSF were aliquoted into 1.5ml aliquots
- Now: first 10 x aliquots will be 0.5ml and the rest will be 1ml
- Implications:
 - Kit contents
 - Labeling samples
 - Processing plasma & CSF
 - Sample shipment

Kit Request Module

www.kits.iu.edu/NAPS2

NAPS2 ACTIVE STUDY PAGE

Welcome NAPS2 Study staff, coordinators, and PI's.

This section encompasses study specific tools and videos for your reference. If you have any questions, comments, or new ideas please contact NCRAD by **email** or phone **1-800-526-2839** or directly at **317-278-8413**.

SPECIMEN COLLECTION OVERVIEW

	VISIT 1	VISIT 2	VISIT 3	VISIT 4	VISIT 5
Serum	✓	✓	✓	✓	✓
Plasma	✓	✓	✓	✓	✓
Buffy Coat*	✓	✓	✓	✓	✓
RNA	✓	✓	✓	✓	✓
CSF*	✓	✓	✓	✓	✓

* CSF collection optional after visit 1

Study Resources

KIT REQUEST MODULE

Please follow the below link to access the Kit Request Module. This link will direct you to a REDCap database where study coordinators and staff may request kits, individual supplies, and/or labels. Study related sites will use the same link for ordering supplies related to blood-based samples and for CSF. Please allow a total of three weeks for kit requests to be compiled and delivered to your site.

[Kit Request System →](#)

BIOLOGICAL SAMPLE AND SHIPMENT NOTIFICATION FORMS

Please use the below downloadable forms to collect information on specimen patient demographics, collection, and processing. We respectfully ask that all completed forms be **emailed** prior to shipment. If you complete the form on the website, you can choose to have it emailed automatically to us. We also ask that all shipments include a hard copy of each sample form.









[Blood Sample Form](#) ↓
[CSF Sample Form](#) ↓

Kit Request Module

- Kits and individual supplies available to order:
 - Blood Collection Kit
 - CSF Kit
 - LP 22 Gauge Kit
 - LP 24 Gauge Kit
 - Blood Supplemental Kit
 - CSF Supplemental Kit
 - Frozen Shipping Kit
 - Individual Supplies

Kit Request Module

1. Choose your site from the drop-down list.
2. The coordinator name and contact information will populate.
3. Verify that this information is correct.

Study Site		  01 - Washington University ▼
Washington University		
Washington University Sleep Medicine Center Attn: Jennifer McLeland 1600 S. Brentwood Blvd., Suite 600 St. Louis, MO 63144 Phone: (314)747-3819 Email: mclelandj@wustl.edu		
Is the contact name above correct? <small>* must provide value</small>	 	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the shipping address above correct? <small>* must provide value</small>	 	<input checked="" type="radio"/> Yes <input type="radio"/> No
Is the e-mail address above correct? <small>* must provide value</small>	 	<input checked="" type="radio"/> Yes <input type="radio"/> No

Kit Request Module

1. If any of the information is incorrect, please indicate so by selecting “No.”
2. A text box will appear.
3. Provide the correct information here.

Is the contact name above correct? <i>* must provide value</i>	<input type="radio"/> Yes <input checked="" type="radio"/> No	reset
Contact New Name <i>* must provide value</i>	<input type="text"/>	
Is the shipping address above correct? <i>* must provide value</i>	<input type="radio"/> Yes <input checked="" type="radio"/> No	reset
New Shipping Address <i>* must provide value</i>	<input type="text"/>	
Is the e-mail address above correct? <i>* must provide value</i>	<input type="radio"/> Yes <input checked="" type="radio"/> No	reset
New E-mail Address <i>* must provide value</i>	<input type="text"/>	

Kit Request Module: Kit Selection

- Indicate the quantity needed of each kit
- Each kit will be registered for cycle 1, but you can use it for any visit
- Once selected, kit components of the chosen kit will appear at the bottom of the screen
- ****Note: You can order more than one type of kit in a single kit request****

Total Number Blood Collection Kits Requested	<input type="text" value="1"/>	
Total Number CSF Kits Requested	<input type="text"/>	
Total Number of LP Trays (22 Gauge) Requested	<input type="text"/>	
Total Number of LP Trays (24 Gauge) Requested	<input type="text"/>	
Total Number of Supplemental Blood Kits Requested	<input type="text"/>	
Total Number of Supplemental CSF Kits Requested	<input type="text"/>	
Total Number of Frozen Shipping Kits Requested	<input type="text"/>	
Do you require any individual supplies?	<input type="radio"/> Yes <input type="radio"/> No	
reset		
Each Blood Collection Kit Includes (10854):		
Quantity	Item Description	Finite ID (for NCRAD internal purposes only)
1	Plain Red Top Serum (Red-Top) Blood Collection Tube (10 ml)	CT006
4	EDTA Lavender Top Blood Collection Tube (10 ml)	CT001
1	PAXgene™ Blood Collection Tube (2.5 ml)	CT004
1	50-ml conical polypropylene tube-individually wrapped	CV056
10	Cryovial (2.0 ml) with green cap	CV064
15	Cryovial (2.0 ml) with lavender cap	CV027
4	Cryovial (2.0 ml) with clear cap	CV014
2	Cryovial (2.0 ml) with blue cap	CV034
3	Cryovial (2.0 ml) with red cap	CV028
1	Disposable graduated transfer pipette	CV015
1	Microcentrifuge box (81-slot)	CV021
1	Resealable bag labeled w Kit bag label	ST002 & LB006
1	Bubble wrap tube sleeve	SH032
50 (total)	Labels: <ul style="list-style-type: none"> • 40 - Pre-printed Collection and Aliquot Tube Label • 3 - Pre-printed Kit Number Label • 7 - Labels for Handwritten NAP52 ID 	LB003

Kit Request Module: Kit Selection

- If individual supplies are needed, select yes, select the supplies needed, and specify quantities below.
- Click “Submit” to turn in your request.
- The IU staff will notify you that your request has been received and address any issues.

Do you require any individual supplies?

Yes
 No

[reset](#)

Individual Supplies Requested

- Cryobox (25-slot)
- Cryovial tube (2.0 ml) with lavender cap
- Cryovial tube (2.0 ml) with red cap
- Cryovial tube (2.0 ml) with orange cap
- Cryovial tube (2.0 ml) with yellow cap
- Cryovial tube (2.0 ml) with blue cap
- Cryovial tube (2.0 ml) with clear cap
- 50-ml conical polypropylene tube-individually wrapped
- 15-ml conical polypropylene tube-individually wrapped
- FedEx return airbill
- Shipping container for dry ice shipment (Med Frozen Shipper/Lg Brain Box) (16 x 16 x 15 1/2")
- Plastic biohazard bag with absorbent sheet
- Disposable graduated transfer pipette (3 ml)
- EDTA (Lavender-Top) Blood Collection Tube (10 ml)
- PAXgene Blood Collection Tube (2.5 ml)
- Serum (Red-top) Blood Collection Tube (10 ml)
- Warning label packet (UN3373, Fragile, FEDEX Dry Ice Label)
- UN3373 label
- Biohazard label
- Dry ice shipping label
- Fine Point Sharpies
- NAPS ID Labels
- Sprotte 22G x 3.5" (90 mm) needle
- Sprotte 24G x 3.5" (90 mm) needle

Please enter individual supplies and quantities requested

3 - Cryovial tubes (2.0 ml) with lavender cap
2 - PAXgene Blood Collection Tubes (2.5 ml)

[Expand](#)

Kit Request Module

- Each site is responsible for ordering kits and maintaining supplies on site for their scheduled participants.
- To order kits, sites will use the Indiana University online kit ordering module: www.kits.iu.edu/NAPS2
- Allow around **3 weeks** for your order to be processed and shipped.

Specimen Labels

Specimen Labels

- Label type summary:
 - Kit Number Labels
 - NAPS2 ID Labels
 - Collection and Aliquot Tube Labels
 - Differ by specimen type
- All labels are provided in the kits

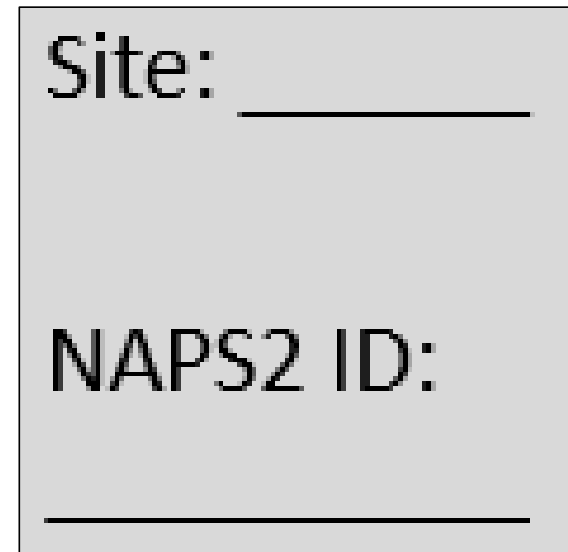
Specimen Labels: Kit Number Labels

- Used to track patient samples and provide quality assurance
- Will be placed on:
 - Blood & CSF Sample and Shipment Notification Forms
 - Outside of cryobox(es) that houses aliquot tubes during storage and shipment
 - CSF samples will have a different kit number than blood samples



Specimen Labels: NAPS ID Labels

- Subjects will be identified by their NAPS2 ID
- Sites will be responsible for handwriting the IDs on the provided labels
 - Fill in labels prior to adhering to tubes
 - Must use fine-point marker
- Labels will be placed on all collection tubes:
 - Serum Red Top Tube (10ml)
 - EDTA Lavender Top Tube (4 x 10 ml)
 - PAXGene™ Tube (2.5ml)



Site: _____

NAPS2 ID: _____

Specimen Labels: Collection & Aliquot Tube Labels



NAPS2



Study Name

0001234567



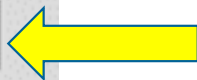
Specimen Number (Assigned by NCRAD)

SERUM



Sample Type (Serum, Plasma, Buffy Coat, RNA or CSF)

Kit #: 300001



Kit # (Assigned by NCRAD and unique to the subject and visit)

Volume → 10000 uL



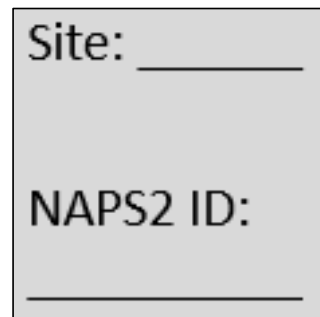
Specimen Labels: Blood Collection Tubes

- All Serum, EDTA, and PAXGene™ collection tubes will have two labels:
 - Collection Tube Label
 - Site and NAPS2 ID Label

Label 1:

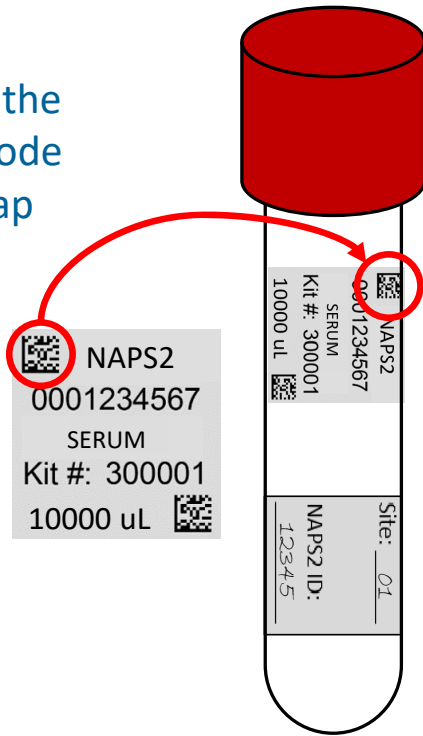


Label 2:

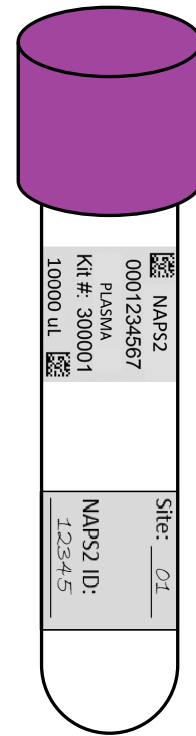


Specimen Labels: Blood Collection Tubes

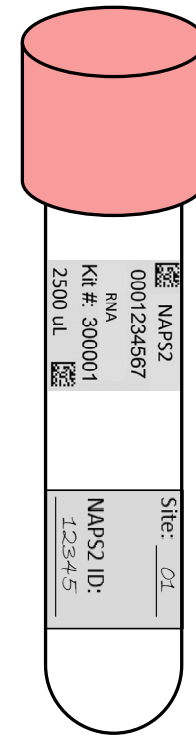
Please ensure the left-hand barcode is near the cap



10mL Serum Tube

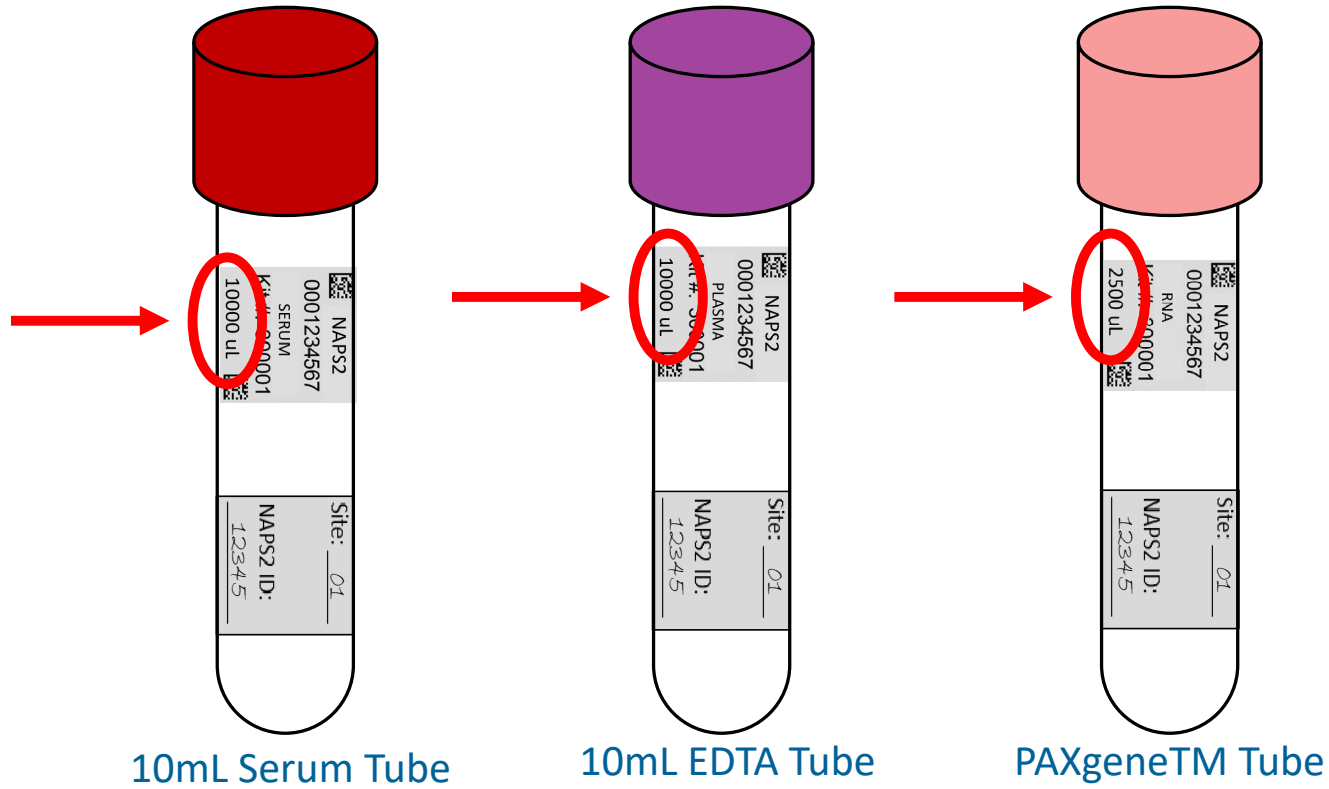


10mL EDTA Tube



PAXgene™ Tube

Specimen Labels: Blood Collection Tubes



Specimen Labels: Aliquot Tubes

- All aliquot tubes will have only one label:
 - Aliquot Tube Label

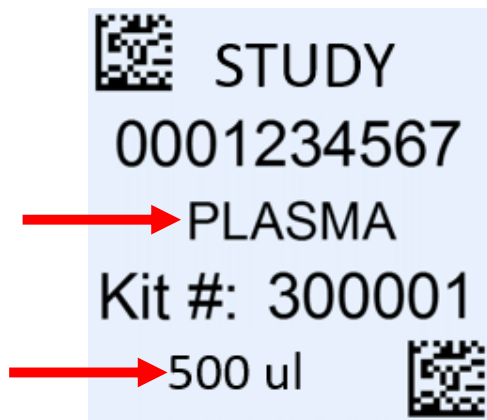


Cap Color	Sample Type
Red Cap	Serum
Green Cap	0.5ml aliquots (plasma and CSF)
Lavender Cap	1ml Plasma aliquots
Clear Cap	Buffy Coat
Blue Cap	Residual (Serum, plasma, or CSF)
Orange Cap	1ml CSF aliquots
Yellow Cap	CSF to Local Lab



Specimen Labels: Aliquot Tubes

- All aliquot tubes will have only one label:
 - Aliquot Tube Label

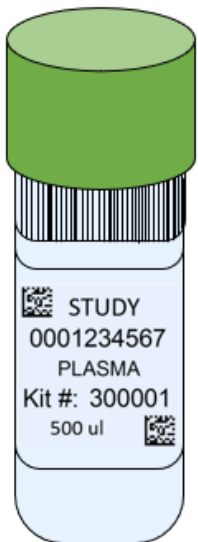


Cap Color	Sample Type
Red Cap	Serum
Green Cap	0.5ml aliquots (plasma and CSF)
Lavender Cap	1ml Plasma aliquots
Clear Cap	Buffy Coat
Blue Cap	Residual (Serum, plasma, or CSF)
Orange Cap	1ml CSF aliquots
Yellow Cap	CSF to Local Lab



Specimen Labels: Aliquot Tubes (Serum, Plasma, Buffy Coat, and CSF)

ALIQUOT TUBE LABELING DIAGRAM



Incorrect



Correct



- Place the label horizontally.
- Place the left-hand barcode near the cap.

Specimen Labels: Yellow Aliquot Tube

Note: NCRAD does not provide a label for the yellow aliquot tube.

Cap Color	Sample Type
Red Cap	Serum
Green Cap	0.5ml aliquots (plasma and CSF)
Lavender Cap	1ml Plasma aliquots
Clear Cap	Buffy Coat
Blue Cap	Residual (Serum, plasma, or CSF)
Orange Cap	1ml CSF aliquots
Yellow Cap	CSF to Local Lab



Specimen Labels: Labeling Biologic Samples

- Label all collection and aliquot tubes before collecting, processing or freezing samples.
- Label only 1 subject's tubes at a time to avoid mix-ups.
- Wrap the label around the tube horizontally. Label position is important for all tube types.
- Make sure the label is completely adhered by rolling between your fingers.

Handling/ Processing Study Specimens

Site Required Equipment

- Blood Collection/Safety Equipment:




1. Personal Protective Equipment (PPE)
 - Lab Coat, Safety Glasses
2. Tourniquet
3. Alcohol Prep Pad
4. Gauze Pad
5. Butterfly Needles
6. Bandage
7. Sharps Bin and Lid

- Processing/Storage Equipment:

1. Centrifuge capable of ≥ 2000 xg with refrigeration to 4°C
2. -80°C Freezer
3. Wet Ice Bucket

Blood Collection & Processing:

Sample Collection Tube

Draw Order	Tube Type	Number of Tubes Drawn (per visit)	Tube Image
1	Plain Red Top Serum Tube (10 ml)	1	
2	EDTA (Lavender-Top) Tube (10 ml)	4	
3	PAXgene™ Blood Collection Tube (2.5 ml)	1	

Blood Collection & Processing: Aliquot Cryovials & Cap Colors

Cap Color	Sample Type
Red Cap	Serum
Green Cap	0.5ml aliquots (plasma and CSF)
Lavender Cap	1ml Plasma aliquots
Clear Cap	Buffy Coat
Blue Cap	Residual (Serum, plasma, or CSF)
Orange Cap	1ml CSF aliquots
Yellow Cap	CSF to Local Lab



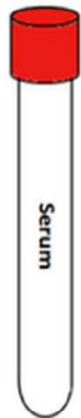
To: Kelley Faber		Email: alzstudy@iu.edu		Phone: 1-800-526-2839	
General Information:					
From: _____	Date: _____	Kit Barcode			
Phone: _____	Email: _____				
NAPS2 ID: _____	GUID ID: _____				
Sex: M F	Year of Birth: _____				
Visit (circle one): Cycle 1 Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 7 Cycle 8					
Select one: <input type="checkbox"/> Case <input type="checkbox"/> Control					
Tracking #: _____ CSF Collected? Yes No					
Blood Collection: Blood Collected (circle one): Yes No					
1. Date Drawn: _____ [MMDDYYYY]		2. Time of Draw: 24 hour clock: _____ [HHMM]			
3. Date subject last ate: _____ [MMDDYYYY]		4. Last time subject ate: 24 hour clock: _____ [HHMM]			
Blood Processing:					
<u>RNA (PAXgene Tube)</u>					
Total volume of blood drawn into a 1 x 2.5mL PAXgene RNA tube: _____ mL					
Date PAXgene RNA tube placed in -80°C freezer: _____					
Time PAXgene RNA tube placed in -80°C freezer: 24 hour clock: _____ [HHMM]					
<u>Serum (Red Top Tube)</u>					
Time spin started: 24 hour clock: _____ [HHMM]		Duration of centrifuge: _____ minutes			
Temp of centrifuge: _____ °C		Rate of centrifuge: _____ x g			
Original volume drawn (1x10mL Serum tube): _____ mL					
Time aliquoted: _____ [HHMM]		Number of 1.5mL serum aliquots created: _____ x 1.5mL			
If applicable, volume of residual serum aliquot (less than 1.5 mL) (Blue cap): _____ mL					
If applicable, specimen number of residual serum aliquot (Last four digits): _____					
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]		Storage temperature of freezer: _____ °C			
<u>Plasma & Buffy Coat (EDTA (Lavender Top) Tube - 10mL)</u>					
Time spin started: 24 hour clock: _____ [HHMM]		Duration of centrifuge: _____ minutes			
Temp of centrifuge: _____ °C		Rate of centrifuge: _____ x g			
Original volume drawn (4x10mL EDTA tube): _____ mL					
EDTA #1: _____ mL		EDTA #2: _____ mL		EDTA #3: _____ mL EDTA #4: _____ mL Total Volume: _____ mL	
Time aliquoted: _____ [HHMM]					
<u>Plasma</u>					
Number of 0.5mL plasma aliquots created (green cap): _____ x 0.5mL					
Number of 1.0mL plasma aliquots created (purple cap): _____ x 1.0mL					
If applicable, volume of residual serum aliquot (Blue cap): _____ mL					
If applicable, specimen number of residual plasma aliquot (Last four digits): _____					
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]					
<u>Buffy Coat</u>					
Buffy Coat aliquot #1 (last four digits): _____		Buffy Coat aliquot #2 (last four digits): _____			
Buffy Coat aliquot #1 Volume: _____ mL		Buffy Coat aliquot #2 Volume: _____ mL			
Buffy Coat aliquot #3 (last four digits): _____		Buffy Coat aliquot #4 (last four digits): _____			
Buffy Coat aliquot #3 Volume: _____ mL		Buffy Coat aliquot #4 Volume: _____ mL			
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]		Storage temperature of freezer: _____ °C			
Notes: _____					

To: Kelley Faber		Email: alzstudy@iu.edu		Phone: 1-800-526-2839	
General Information:					
From: <u>Coordinator Name</u>		Date: <u>05/08/2024</u>		Kit Barcode	
Phone: <u>111-111-1111</u>		Email: <u>Email@email.com</u>			
NAPS2 ID: <u>NAPS2-00000</u>		GUID ID: <u>NDAR0000000</u>			
Sex: <input checked="" type="radio"/> M <input type="radio"/> F		Year of Birth: <u>1900</u>			
Visit (circle one): Cycle 1 <input type="radio"/> Cycle 2 <input checked="" type="radio"/> Cycle 3 <input type="radio"/> Cycle 4 <input type="radio"/> Cycle 5 <input type="radio"/> Cycle 6 <input type="radio"/> Cycle 7 <input type="radio"/> Cycle 8 <input type="radio"/>					
Select one: <input checked="" type="checkbox"/> Case <input type="checkbox"/> Control					
Tracking #: _____ CSF Collected? Yes <input type="radio"/> No <input checked="" type="radio"/>					
Blood Collection:					
Blood Collected (circle one): Yes <input checked="" type="radio"/> No <input type="radio"/>					
1. Date Drawn: <u>05/08/2024</u> [MMDDYYYY]		2. Time of Draw: 24 hour clock: _____ [HHMM]			
3. Date subject last ate: _____ [MMDDYYYY]		4. Last time subject ate: 24 hour clock: _____ [HHMM]			
Blood Processing:					
<u>RNA (PAXgene Tube)</u>					
Total volume of blood drawn into a 1 x 2.5mL PAXgene RNA tube: _____ mL					
Date PAXgene RNA tube placed in -80°C freezer: _____					
Time PAXgene RNA tube placed in -80°C freezer: 24 hour clock: _____ [HHMM]					
<u>Serum (Red Top Tube)</u>					
Time spin started: 24 hour clock: _____ [HHMM]		Duration of centrifuge: _____ minutes			
Temp of centrifuge: _____ °C		Rate of centrifuge: _____ x g			
Original volume drawn (1x10mL Serum tube): _____ mL					
Time aliquoted: _____ [HHMM]		Number of 1.5mL serum aliquots created: _____ x 1.5mL			
If applicable, volume of residual serum aliquot (less than 1.5 mL) (Blue cap): _____ mL					
If applicable, specimen number of residual serum aliquot (Last four digits): _____					
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]		Storage temperature of freezer: _____ °C			
<u>Plasma & Buffy Coat (EDTA (Lavender Top) Tube - 10mL)</u>					
Time spin started: 24 hour clock: _____ [HHMM]		Duration of centrifuge: _____ minutes			
Temp of centrifuge: _____ °C		Rate of centrifuge: _____ x g			
Original volume drawn (4x10mL EDTA tube): _____ mL					
EDTA #1: _____ mL		EDTA #2: _____ mL		EDTA #3: _____ mL EDTA #4: _____ mL Total Volume: _____ mL	
Time aliquoted: _____ [HHMM]					
<u>Plasma</u>					
Number of 0.5mL plasma aliquots created (green cap): _____ x 0.5mL					
Number of 1.0mL plasma aliquots created (purple cap): _____ x 1.0mL					
If applicable, volume of residual serum aliquot (Blue cap): _____ mL					
If applicable, specimen number of residual plasma aliquot (Last four digits): _____					
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]					
<u>Buffy Coat</u>					
Buffy Coat aliquot #1 (last four digits): _____		Buffy Coat aliquot #2 (last four digits): _____			
Buffy Coat aliquot #1 Volume: _____ mL		Buffy Coat aliquot #2 Volume: _____ mL			
Buffy Coat aliquot #3 (last four digits): _____		Buffy Coat aliquot #4 (last four digits): _____			
Buffy Coat aliquot #3 Volume: _____ mL		Buffy Coat aliquot #4 Volume: _____ mL			
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]		Storage temperature of freezer: _____ °C			
Notes: _____					

Serum Preparation (10ml Red Top Tube)

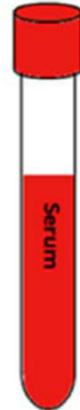


Step One



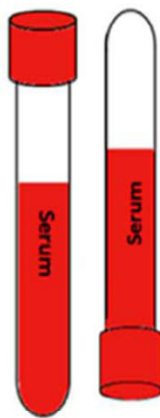
- Store tubes at room temperature.
- Label tubes and cryovials with pre-printed subject labels prior to blood draw.

Step Two



- Collect blood in Serum Tube allowing blood to flow for 10 seconds and ensuring blood flow has stopped.

Step Three



- Immediately after blood draw, invert tube 5 times to mix samples.

Step Four



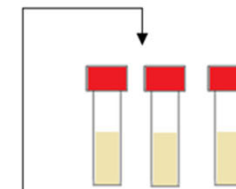
- Allow blood to clot for 30 minutes.
- Within 60 minutes of blood draw, centrifuge samples at 2000 x g for 10 minutes at 4°C.

**Serum tube should remain upright while clotting*

Step Five



- Must be spun, aliquoted, and stored in -80°C freezer within 2 hours of collection.



- Adhere preprinted labels to the red-cap cryovials.
- Aliquot 1.5 ml into each cryovial tube.
- If a residual aliquot is created, document specimen number and volume on Sample Notification Form.
- Store serum aliquots at -80°C until shipment.

Serum Labeling

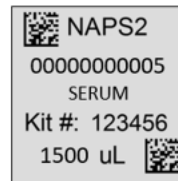
Collection & Aliquot Tube Labels - Serum



- 1 x Plain Red-Top Serum Blood Collection Tube (10mL). Use the Serum label with volume = 10000uL



- 3 x Red cap 2.0mL cryovials. Use the 3 Serum labels that have quantity = 1500uL, with the smallest specimen numbers.



- If needed: 1 x Blue cap 2.0mL cryovials. Use the Serum label that has quantity = 1500uL, with the highest specimen number.

NAPS2 ID Label

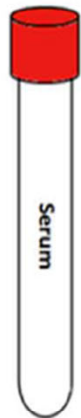
Site: _____
NAPS2 ID: _____

- 1 x Plain Red-Top Serum Blood Collection Tube (10mL)

Serum Preparation (10ml Red Top Tube)

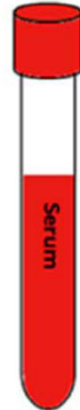


Step One



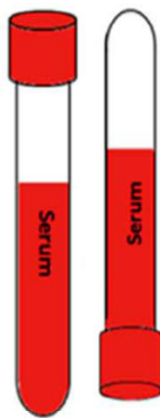
- Store tubes at room temperature.
- Label tubes and cryovials with pre-printed subject labels prior to blood draw.

Step Two



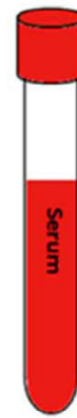
- Collect blood in Serum Tube allowing blood to flow for 10 seconds and ensuring blood flow has stopped.

Step Three



- Immediately after blood draw, invert tube 5 times to mix samples.

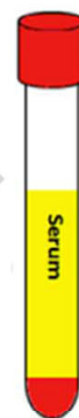
Step Four



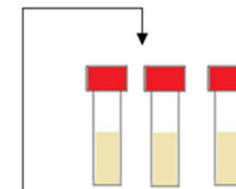
- Allow blood to clot for 30 minutes.
- Within 60 minutes of blood draw, centrifuge samples at 2000 x g for 10 minutes at 4°C.

*Serum tube should remain upright while clotting

Step Five



- Must be spun, aliquoted, and stored in -80°C freezer within 2 hours of collection.



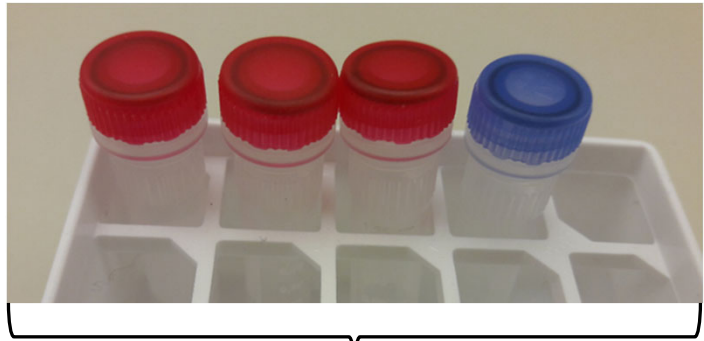
- Adhere preprinted labels to the red-cap cryovials.
- Aliquot 1.5 ml into each cryovial tube.
- If a residual aliquot is created, document specimen number and volume on Sample Notification Form.
- Store serum aliquots at -80°C until shipment.

Red Top Tube – Serum Collection



Serum

RBC, WBC
& Platelet
Clot

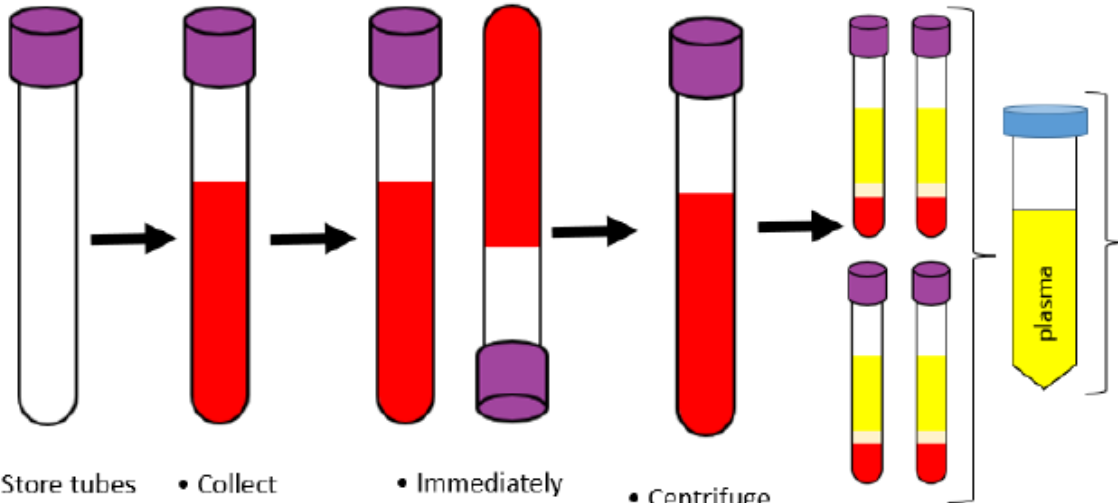






Serum Aliquots (up to 4 possible, including the residual)






Close up view of
2.0 ml Cryovial

Plasma & Buffy Coat Preparation (EDTA Tube x 4)



- 
 • 10 x 0.5 ml aliquots of plasma into green cap cryovials
- 
 • 15 x 1.0 ml aliquots of plasma into purple cap cryovials
- 
 • If residual aliquot is created, use the blue-capped cryovial and a "PLASMA" label. Document specimen number and volume on Sample Form
- 
 • Store plasma aliquots upright at -80°C until shipment to NCRAD

- 
 • Aliquot the buffy coat from each EDTA tube separately, into its own cryovial
- 
 • 4 x 1.0 ml aliquots of the buffy coat (may have some residual plasma and RBCs included) into the clear-capped cryovials.
- 
 • Store buffy coat aliquot upright at -80°C until shipment to NCRAD

- Store tubes at room temp
- Each tube should be labeled with Collection Tube and Site and PTID labels.

- Collect Blood into 1 EDTA tube, allowing blood to flow for 10 seconds and ensuring blood flow has stopped

- Immediately after blood draw, invert tube 8-10 times to mix sample.

- Centrifuge samples at 2000 x g for 10 minutes at 4°C

Ensure tubes are not expired prior to blood draw

Spin, aliquot, and freeze all plasma and buffy coat aliquots within 2 hours of collection

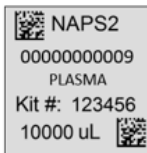
Please be sure to compare the labels on each tube and cryovials to the Biological Sample Form included with each kit

EDTA Tube – Plasma & Buffy Coat Labeling

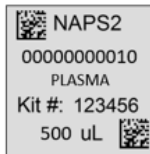
Collection & Aliquot Tube Labels – Plasma & Buffy Coat



through



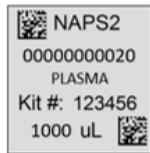
- 4 x EDTA (Lavender-Top) Blood Collection Tube (10mL). Use the PLASMA labels with quantity = 10000uL.



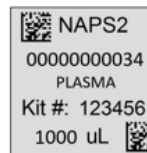
through



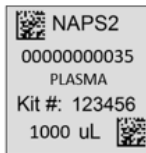
- 10 x Green cap 2.0mL cryovials. Use the ten PLASMA labels with quantity = 500uL.



through



- 15 x Purple cap 2.0mL cryovials. Use the PLASMA labels with quantity = 1000uL.



- If needed: 1 x Blue cap 2.0mL cryovial. Use the PLASMA label with the highest specimen number and quantity = 1000uL.



through



- 4 x clear cap 2.0mL cryovials.

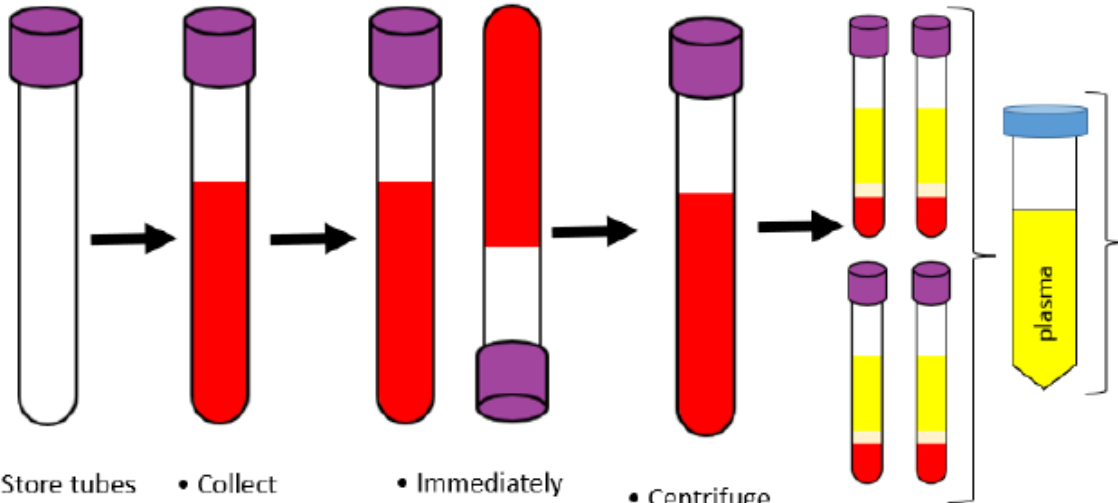
NAPS2 ID Labels




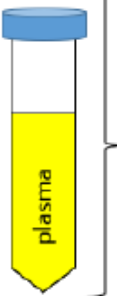
Site: _____




NAPS2 ID: _____

- 4 x Clear cap 2.0mL cryovial. Use the four BUFLY COAT labels.

Plasma & Buffy Coat Preparation (EDTA Tube x 4)



- 
 • 10 x 0.5 ml aliquots of plasma into green cap cryovials
- 
 • 15 x 1.0 ml aliquots of plasma into purple cap cryovials
- 
 • If residual aliquot is created, use the blue-capped cryovial and a "PLASMA" label. Document specimen number and volume on Sample Form
- 
 • Store plasma aliquots upright at -80°C until shipment to NCRAD

- 
 • Aliquot the buffy coat from each EDTA tube separately, into its own cryovial
- 
 • 4 x 1.0 ml aliquots of the buffy coat (may have some residual plasma and RBCs included) into the clear-capped cryovials.
- 
 • Store buffy coat aliquot upright at -80°C until shipment to NCRAD

- Store tubes at room temp
- Each tube should be labeled with Collection Tube and Site and PTID labels.

- Collect Blood into 1 EDTA tube, allowing blood to flow for 10 seconds and ensuring blood flow has stopped

- Immediately after blood draw, invert tube 8-10 times to mix sample.

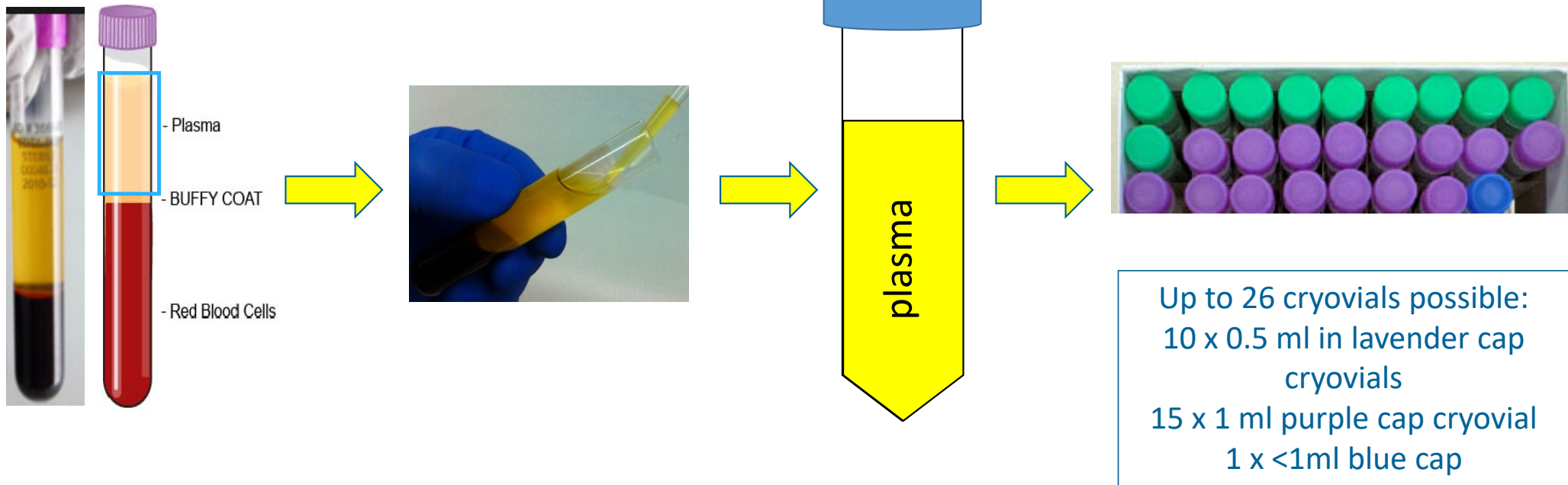
- Centrifuge samples at 2000 x g for 10 minutes at 4°C

Ensure tubes are not expired prior to blood draw

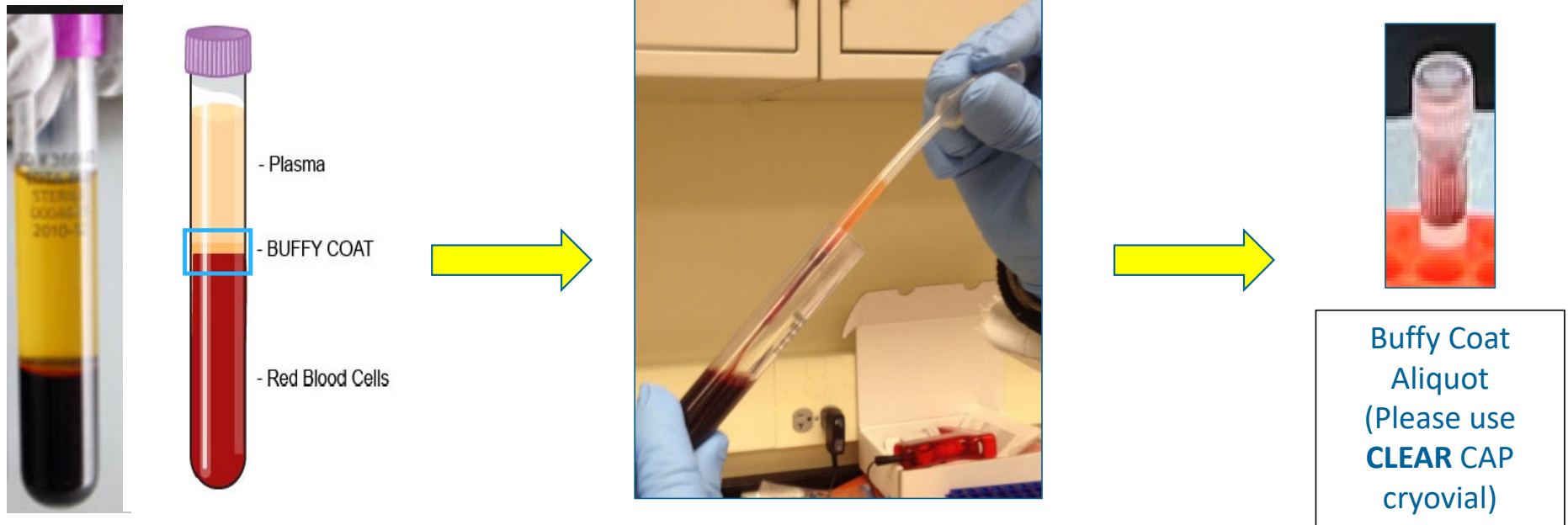
Spin, aliquot, and freeze all plasma and buffy coat aliquots within 2 hours of collection

Please be sure to compare the labels on each tube and cryovials to the Biological Sample Form included with each kit

EDTA Tube – Plasma Collection



EDTA Tube – Buffy Coat Collection



*Sites have the option of storing 1-2 buffy coats per participant per visit locally.

RNA Preparation (2.5ml PAXgene™ Tube)

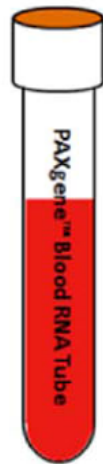


Step One



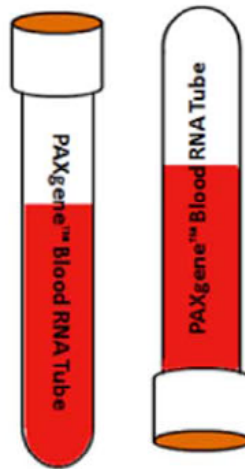
- Store tubes at room temperature.
- Label tubes with pre-printed labels prior to blood draw.

Step Two



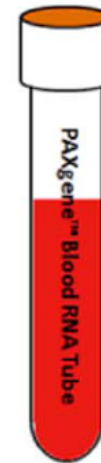
- Collect blood in PAXgene™ tube allowing blood to flow for 10 seconds and ensuring blood flow has stopped.

Step Three



- Immediately after blood draw, invert tubes 8-10 times to mix samples.

Step Four



- Store tubes at -80°C in a wire rack until shipment.

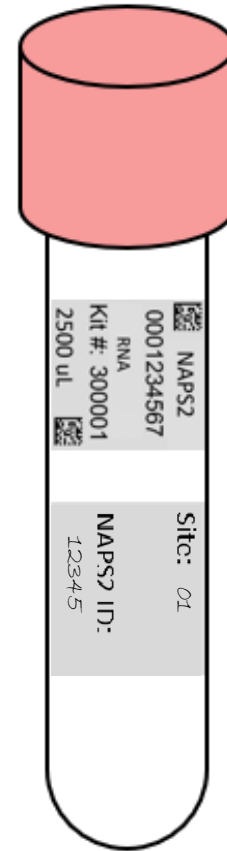


RNA PAXgene™ Tube Labeling

Site: _____

NAPS2 ID:

 NAPS2
00000000040
RNA
Kit #: 123456
2500 uL 



PAXgene™ Tube

RNA Preparation (2.5ml PAXgene™ Tube)

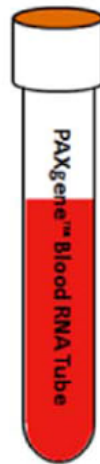


Step One



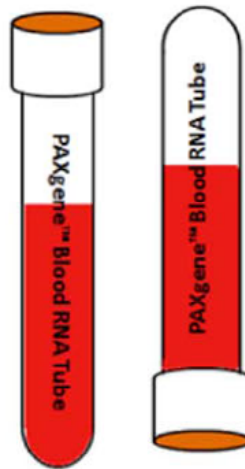
- Store tubes at room temperature.
- Label tubes with pre-printed labels prior to blood draw.

Step Two



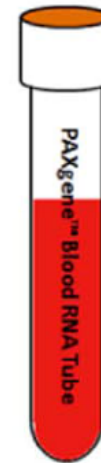
- Collect blood in PAXgene™ tube allowing blood to flow for 10 seconds and ensuring blood flow has stopped.

Step Three



- Immediately after blood draw, invert tubes 8-10 times to mix samples.

Step Four



- Store tubes at -80°C in a wire rack until shipment.



CSF Collection and Processing

Important Note

CSF samples should be collected in the morning before breakfast and after an overnight fast when possible. Only water should be permitted past midnight, until lumbar puncture is completed.



CSF Collection and Processing

Prior to CSF Collection:

1. Print CSF Sample and Shipment Notification Form.
1. Label all tubes accordingly.

Please email or fax the form on or prior to the date of shipment

To: Kelley Faber			Email: alzstudy@iu.edu			Phone: 1-800-526-2839		
General Information:								
From: _____			Date: _____ [MM/DD/YYYY]					
Phone: _____			Email: _____					
Tracking #: _____								
NAPS2 Participant Study Information:								
NAPS2 ID: _____			GUID ID: _____					
Sex (circle one): Male Female			Year of Birth: _____					
Select one: <input checked="" type="checkbox"/> Case <input type="checkbox"/> Control								
Visit Information:								
CSF Collected? Yes No			Kit Barcode					
Gauge needle used for LP (circle one): 22G 24 G								
Visit (circle one): Cycle 1 Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 7 Cycle 8								
Collection Process: Gravity Method Aspiration <small>(If aspiration method is used, it must be documented as a protocol violation)</small>								
CSF Collection:								
1. Date of Collection: _____ [MMDDYYYY]								
2. Time of Collection: 24 hour clock: _____ [HHMM]								
3. Date subject last ate: _____ [MMDDYYYY]								
4. Last time subject ate: 24 hour clock: _____ [HHMM]								
CSF Processing:								
Time Spint Started: 24 hour clock: _____ [HHMM]								
Duration of Centrifuge: _____ minutes								
Temperature of Centrifuge: _____ °C			Rate of Centrifuge: _____ xg					
Total Amount of CSF Collected: _____ mL								
Time Aliquoted: _____ [HHMM]								
Number of 0.5 mL CSF aliquots created (green cap): _____ x 0.5mL								
Number of 1.0 mL CSF aliquots created (orange cap): _____ x 1.0mL								
If applicable, volume of residual CSF aliquot (blue cap): _____ mL								
If applicable, specimen number of residual CSF aliquot: _____								
Time Frozen: _____ [HHMM]			Storage Temperature of Freezer: _____ °C					
Notes:								

Ver: 02.2024

CSF Draw Labels

Collection & Aliquot Tube Labels - CSF



10 x Green cap 2.0mL cryovials. Use the ten CSF labels with the lowest specimen numbers and quantity = 500uL.



25 x Orange cap 2.0mL cryovials. Use the CSF labels with quantity = 1000uL.



If needed: 1 x Blue cap 2.0mL cryovials. Use the CSF label with the highest specimen number and quantity = 1000uL.

Please email or fax the form on or prior to the date of shipment

To: Kelley Faber		Email: alzstudy@iu.edu		Phone: 1-800-526-2839	
General Information:					
From: <u>Coordinator Name</u>		Date: <u>05/08/2024</u> [MM/DD/YYYY]			
Phone: <u>111-111-1111</u>		Email: <u>CoordinatorEmail@email.com</u>			
Tracking #: _____					
NAPS2 Participant Study Information:					
NAPS2 ID: <u>NAPS2-00000</u>		GUID ID: <u>NDAR0000000</u>			
Sex (circle one): Male <input type="checkbox"/> Female <input checked="" type="checkbox"/>		Year of Birth: <u>1900</u>			
Select one: <input checked="" type="checkbox"/> Case <input type="checkbox"/> Control					
Visit Information:					
CSF Collected? Yes <input type="checkbox"/> No <input type="checkbox"/>		Kit Barcode			
Gauge needle used for LP (circle one): <u>22G</u> 24 G					
Visit (circle one): <u>Cycle 1</u> Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 7 Cycle 8					
Collection Process: <u>Gravity Method</u> Aspiration <small>(If aspiration method is used, it must be documented as a protocol violation)</small>					
CSF Collection:					
1. Date of Collection: <u>05/08/2024</u> [MMDDYYYY]					
2. Time of Collection: 24 hour clock: _____ [HHMM]					
3. Date subject last ate: _____ [MMDDYYYY]					
4. Last time subject ate: 24 hour clock: _____ [HHMM]					
CSF Processing:					
Time Spint Started: 24 hour clock: _____ [HHMM]					
Duration of Centrifuge: _____ minutes					
Temperature of Centrifuge: _____ °C		Rate of Centrifuge: _____ xg			
Total Amount of CSF Collected: _____ mL					
Time Aliquoted: _____ [HHMM]					
Number of 0.5 mL CSF aliquots created (green cap): _____ x 0.5mL					
Number of 1.0 mL CSF aliquots created (orange cap): _____ x 1.0mL					
If applicable, volume of residual CSF aliquot (blue cap): _____ mL					
If applicable, specimen number of residual CSF aliquot: _____					
Time Frozen: _____ [HHMM]		Storage Temperature of Freezer: _____ °C			
Notes:					

Ver: 02.2024

CSF Draw Labels

Collection & Aliquot Tube Labels - CSF



10 x Green cap 2.0mL cryovials. Use the ten CSF labels with the lowest specimen numbers and quantity = 500uL.



25 x Orange cap 2.0mL cryovials. Use the CSF labels with quantity = 1000uL.

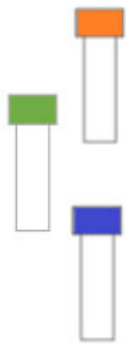


If needed: 1 x Blue cap 2.0mL cryovials. Use the CSF label with the highest specimen number and quantity = 1000uL.

*There is NOT a provided label for the yellow cap cryovial

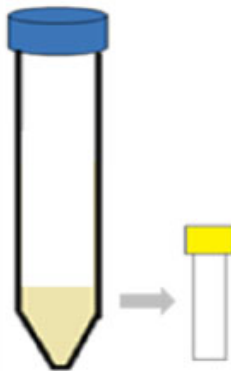
CSF Preparation (20-30 ml)

Step One



- Label tubes with pre-printed subject labels prior to collection.
- Pre-chill all cryovials on wet ice.

Step Two



- Collect initial 1-2 ml (if bloody, collect CSF until cleared of blood) into 50 ml conical tube.
- If not bloody, transfer 1-2 ml into the yellow-cap cryovial.
- Send to local lab for testing.

Step Three



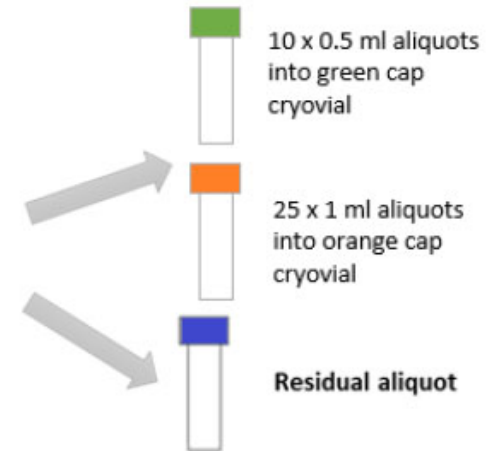
- Collect another 20-30 ml CSF into a new 50 ml sterile conical tube.

Step Four



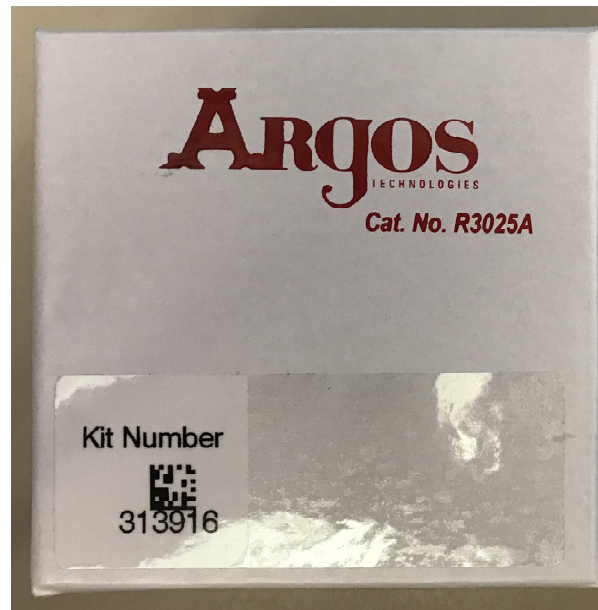
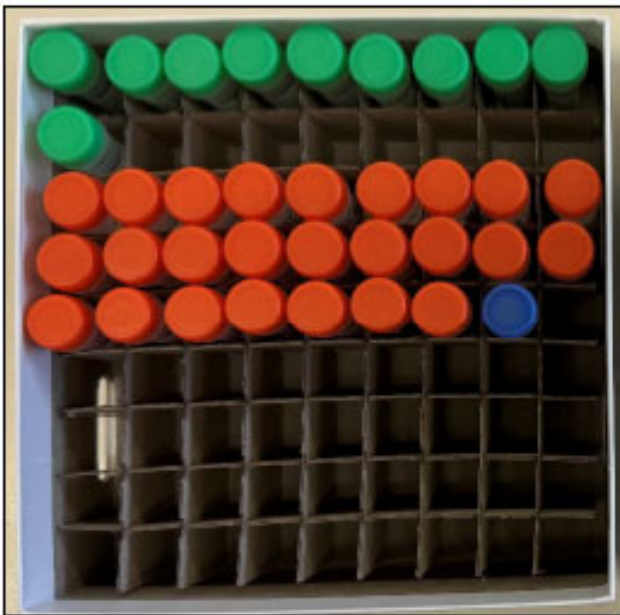
- Place sample upright on wet ice until centrifugation begins.
- Within 15 minutes of collection, centrifuge sample at 4°C for 10 minutes at 2000xg.

Step Five



- Aliquot 0.5 ml into 10 x green cryovials.
- Aliquot 1 ml into 25 x orange-cap cryovials.
- If a residual aliquot is created, aliquot into blue-cap cryovial. Document specimen number and volume on CSF Sample Notification Form.
- Store CSF aliquots at -80°C until shipment.

CSF Collection and Processing



CSF Aliquot tube for local lab (label not provided)

Please email or fax the form on or prior to the date of shipment

To: Kelley Faber Email: alzstudy@iu.edu Phone: 1-800-526-2839

General Information:

From: Coordinator Name Date: 05/08/2024 [MM/DD/YYYY]

Phone: 111-111-1111 Email: CoordinatorEmail@email.com

Tracking #: _____

NAPS2 Participant Study Information:

NAPS2 ID: NAPS2-00000 GUID ID: NDAR0000000

Sex (circle one): Male Female Year of Birth: 1900

Select one: Case Control

Visit Information:

CSF Collected? Yes No

Kit Barcode

Gauge needle used for LP (circle one): 22G 24 G

Visit (circle one): Cycle 1 Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 7 Cycle 8

Collection Process: Gravity Method Aspiration

(If aspiration method is used, it must be documented as a protocol violation)

CSF Collection:

1. Date of Collection: 05/08/2024 [MMDDYYYY]

2. Time of Collection: 24 hour clock: 0917 [HHMM]

3. Date subject last ate: 05/07/2024 [MMDDYYYY]

4. Last time subject ate: 24 hour clock: 1800 [HHMM]

CSF Processing:

Time Spint Started: 24 hour clock: 0925 [HHMM]

Duration of Centrifuge: 10 minutes

Temperature of Centrifuge: 4 °C Rate of Centrifuge: 2000 xg

Total Amount of CSF Collected: 30 mL

Time Aliquoted: 0935 [HHMM]

Number of 0.5 mL CSF aliquots created (green cap): 10 x 0.5mL

Number of 1.0 mL CSF aliquots created (orange cap): 25 x 1.0mL

If applicable, volume of residual CSF aliquot (blue cap): _____ mL

If applicable, specimen number of residual CSF aliquot: _____

Time Frozen: 0945 [HHMM] Storage Temperature of Freezer: -80 °C

Notes:

Leave tracking number blank for now. Fill this out when you are ready to ship the samples to NCRAD.

Sample Shipping

Frozen Shipping: Guidelines

- **Ship Monday-Wednesday Only**

- Hold packaged samples in a -80°C freezer until pickup.
- Batch Samples together
 - Batch shipping should be performed every 3 months or as a full shipment of specimens accumulates, whichever is sooner.



Large Frozen Shipper:

** 45 lbs of dry ice pellets

AND

Fits up to 4 x 81-cell cryoboxes **AND** 4 x 2.5ml PAXgene™ tubes.



Small Frozen Shipper:

**10 lbs of dry ice pellets

AND

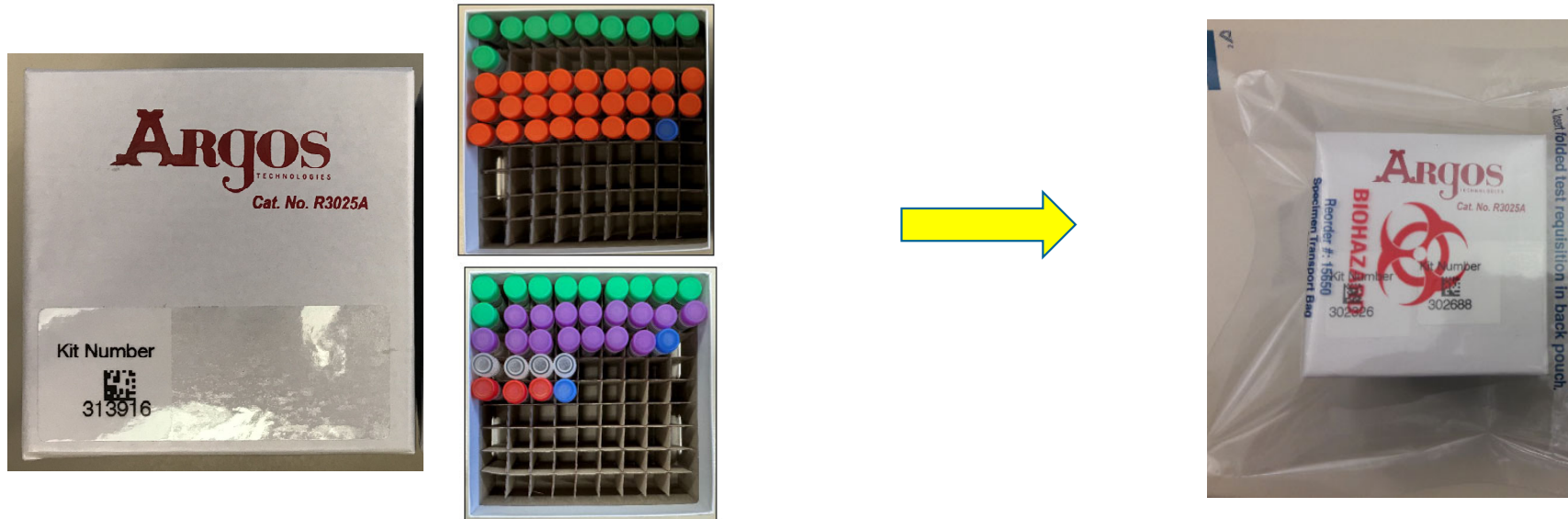
Fits up to 2 x 81-cell cryoboxes **AND** 2 x 2.5ml PAXgene™ tubes.

Sample Shipment Summary

Sample Type	Collection Tube	Processing/ Aliquoting	Tubes to NCRAD	Ship
Whole blood for isolation of Serum	1 x Plain Red-Top Serum Blood Collection Tube (10ml)	1.5 ml serum aliquot per 2.0 cryovial (red cap). Residual volume placed in 2.0 cryovial with blue cap.	Up to 4	Frozen
Whole blood for isolation of plasma and buffy coat	4 x EDTA (Lavender-Top) Blood Collection Tube (10 ml)	<p>PLASMA: 10 x 0.5ml aliquots in 2.0ml green cap cryovials.</p> <p>15 x 1.0ml aliquots in 2.0ml purple cap cryovials.</p> <p>Residual volume placed in 2.0ml cryovial with blue cap.</p>	Up to 26	Frozen
		<p>BUFFY COAT: Aliquot buffy coat from each (4) EDTA tube into its own 2.0ml clear cap cryovial</p>	Up to 4*	Frozen
Whole blood for RNA extraction	1x PAXgene™ Blood Collection Tube (2.5 ml)	N/A	1	Frozen
CSF	Sterile Containers (20-30 ml CSF)	10 x 0.5ml CSF in the first 10 green cap cryovials. 25 x 1.0ml CSF in 2.0 orange cap cryovials. Residual volume place in 2.0ml cryovial with blue cap. 1 x 1-2ml CSF for local lab placed in 2.0ml yellow cap cryovial.	Up to 36	Frozen

*Sites may elect to keep 1-2 buffy coats from each visit locally.

Frozen Shipping: Cryoboxes



Place CSF aliquots in one cryobox and the serum/plasma/buffy coat aliquots in a second cryobox. Place frozen PAXgene™ tube in provided bubble wrap tube sleeve, seal, and place in biohazard bag with the cryobox containing serum/plasma/buffy coat. Seal biohazard bag according to the instructions on the bag. Be sure to adhere a Kit Number Label on the lid of each cryobox.

Place only ONE cryobox per Biohazard bag. PAXgene™ should be placed in the bag with the cryobox containing serum/plasma/buffy coat samples.

Frozen Shipping: Dry Ice Requirements

- Fully cover the cryoboxes with about 2 inches of dry ice in the provided shipper.



Large Frozen Shipper:

** 45 lbs of dry ice pellets

AND

Fits up to 4 x 81-cell cryoboxes **AND** 4 x 2.5ml PAXgene™ tubes.



Small Frozen Shipper:

**10 lbs of dry ice pellets

AND

Fits up to 2 x 81-cell cryoboxes **AND** 2 x 2.5ml PAXgene™ tubes.



Frozen Shipping: Dry Ice Requirements

Class 9 Dry Ice label should not be covered with other stickers and must be completed, or the shipping carrier will reject/return your package!

Shipper's Declaration not Required.
Dry Ice amount must be in kilograms.
Note: 2 lbs. = 1 kg.

Airwaybills / airbills must have the following:
1. Dry Ice; 9; UN 1845
2. $\frac{\text{Number}}{\text{(Number pkgs)}} \times \frac{\text{wt}}{\text{(wt)}} \text{ Kg}$

Net weight of dry ice in **kg**

Your name & address

Repository name & address:

Dry Ice
_____ kg.

Shipper's Name and Address

06426 1/01 RRD

UN 1845

Consignee Name and Address:

NCRAD
IU School of Medicine
351 W. 10th St
TK-342
Indianapolis, IN 46202

Shipping Frozen Samples

- Schedule FedEx
- *Send Sample and Shipment Notification Forms to IU ahead of shipment*
 - *Email: alzstudy@iu.edu*
 - Please also send notification form to Jennifer McLeland for tracking purposes: mclelandj@wustl.edu

Shipping Regulations and Training

PLEASE NOTE:

- All study personnel responsible for shipping should be certified in biospecimen shipping.
- It is the responsibility of each site to ensure that the appropriate training has been provided and conducted in regards to IATA shipping.

Please see following slides for resources.

Federal Regulations/Training

- Sites are responsible for ensuring proper training is obtained.
- Current federal and international regulations require anyone directly involved with the shipment of potentially infectious materials and other regulated biological materials (including biological specimens and cultures) **be properly trained on pertinent shipping requirements.**
 - **International Air Transport Association (IATA) Training**

DGI Training Center 800-338-2291 DGItraining.com Provides IATA Certified Air Seminars and online courses	IATA Training Schools North America 1(514)390-6726 Europe, Africa & Middle East 41 (22) 799 2751 Asia, Australia & the Pacific 65 239 7232 www.iata.org Training schools located in 30 countries
Saf-T Pak Inc. www.saftpak.com Provides dangerous goods training via CD or on-site instruction for North America and Europe	

UN3373 Biological Substance, Category B Training

- Biological Substance, Category B are specimens being transported for “investigational purposes”
- Recommend: investigator sites document training of category B/dangerous goods
- We recommend establishing a record of your staff’s training and date of instruction
- The training records must be made available upon request by the appropriate national authority
 - Additional information from the Department of Transportation (DOT) can be found on their website <http://hazmat.dot.gov>

Frozen Shipping: FedEx Airbill

• **Airbill must be completed or the shipping carrier will reject/return your package!**

Your name, address, and phone

FedEx Express Package US Airbill Form ID No. 0200 Sender's Copy

FedEx Tracking Number: 8132 0902 9840

From Please print and press hard.

Date: _____ Sender's FedEx Account Number: _____

Sender's Name: _____ Phone: (____) _____

Company: _____

Address: _____ Dept./Floor/Suite/Room: _____

City: _____ State: _____ ZIP: _____

Your Internal Billing Reference OPTIONAL (First 24 characters will appear on invoice)

To

Recipient's Name: NCRAD Phone: 800,526,2939

Company: IV School of Medicine

Address: 351 W. 10th St. TR. 342 Dept./Floor/Suite/Room: _____

Address: _____

City: Indianapolis State: IN ZIP: 46202

4 Express Package Service *To most locations. Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

FedEx First Overnight (Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.)

FedEx Priority Overnight (Next business morning. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.)

FedEx Standard Overnight (Next business afternoon. Saturday Delivery NOT available.)

2 or 3 Business Days

FedEx 2Day A.M. (Second business morning. Saturday Delivery NOT available.)

FedEx 2Day (Second business afternoon. Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.)

FedEx Express Saver (Third business day. Saturday Delivery NOT available.)

5 Packaging *Declared value limit \$500.

FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

Saturday Delivery (NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.)

No Signature Required (Package may be left without obtaining a signature for delivery.)

Direct Signature (Someone at recipient's address may sign for delivery.)

Indirect Signature (If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.)

Does this shipment contain dangerous goods?

No Yes (As per attached Shipper's Declaration.) Yes (Shipper's Declaration not required.) Dry Ice, 9 UN 1845 1 kg Cargo Aircraft Only

Restrictions apply for dangerous goods—see the current FedEx Service Guide.

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Sender (Acct. No. in Section 1 will bill.) Recipient Third Party Credit Card Cash/Check

FedEx Acct. No. (2nd/3 Digits) _____ Ex. Data _____

Total Packages: _____ Total Weight: _____ Total Declared Value* _____

By \$ _____

Your liability is limited to US\$100 unless you declare a higher value. See back for details. By using this airbill you agree to the service conditions on the back of this airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Dangerous goods info for dry ice shipments

Net weight of dry ice in kg

FedEx Account Number (will be prefilled)

• **Sample shipments to NCRAD will be paid via the NAPS2 grant at Washington University**



Biological Sample and Shipment Notification Forms

- A copy of the sample form *must* be emailed to NCRAD prior to the date of sample arrival.
- Please include sample forms in all shipments of frozen samples.
- Email: alzstudy@iu.edu

Biological Sample and Shipment Notification Forms

Biological Sample and Shipment Notification Form: Blood

- Blood Collection for:
 - Whole Blood (RNA)
 - Serum
 - Plasma
 - Buffy Coat
- Send by E-mail prior to shipment, and include a copy in each shipment
- REMINDER: PLEASE make sure this form is filled out completely by the person collecting the samples AND the person processing.

To: Kelley Faber		Email: alzstudy@iu.edu		Phone: 1-800-526-2839	
General Information:					
From: _____		Date: _____		Kit Barcode	
Phone: _____		Email: _____			
NAPS2 ID: _____		GUID ID: _____			
Sex: M F		Year of Birth: _____			
Visit (circle one): Cycle 1 Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 7 Cycle 8					
Select one: <input type="checkbox"/> Case <input type="checkbox"/> Control					
Tracking #: _____ CSF Collected? Yes No					
Blood Collection: Blood Collected (circle one): Yes No					
1. Date Drawn: _____ [MMDDYYYY]		2. Time of Draw: 24 hour clock: _____ [HHMM]			
3. Date subject last ate: _____ [MMDDYYYY]		4. Last time subject ate: 24 hour clock: _____ [HHMM]			
Blood Processing:					
<u>RNA (PAXgene Tube)</u>					
Total volume of blood drawn into a 1 x 2.5mL PAXgene RNA tube: _____ mL					
Date PAXgene RNA tube placed in -80°C freezer: _____					
Time PAXgene RNA tube placed in -80°C freezer: 24 hour clock: _____ [HHMM]					
<u>Serum (Red Top Tube)</u>					
Time spin started: 24 hour clock: _____ [HHMM]		Duration of centrifuge: _____ minutes			
Temp of centrifuge: _____ °C		Rate of centrifuge: _____ x g			
Original volume drawn (1x10mL Serum tube): _____ mL					
Time aliquoted: _____ [HHMM]		Number of 1.5mL serum aliquots created: _____ x 1.5mL			
If applicable, volume of residual serum aliquot (less than 1.5 mL) (Blue cap): _____ mL					
If applicable, specimen number of residual serum aliquot (Last four digits): _____					
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]		Storage temperature of freezer: _____ °C			
<u>Plasma & Buffy Coat (EDTA (Lavender Top) Tube - 10mL)</u>					
Time spin started: 24 hour clock: _____ [HHMM]		Duration of centrifuge: _____ minutes			
Temp of centrifuge: _____ °C		Rate of centrifuge: _____ x g			
Original volume drawn (4x10mL EDTA tube):					
EDTA #1: _____ mL		EDTA #2: _____ mL		EDTA #3: _____ mL EDTA #4: _____ mL Total Volume: _____ mL	
Time aliquoted: _____ [HHMM]					
<u>Plasma</u>					
Number of 0.5mL plasma aliquots created (green cap): _____ x 0.5mL					
Number of 1.0mL plasma aliquots created (purple cap): _____ x 1.0mL					
If applicable, volume of residual serum aliquot (Blue cap): _____ mL					
If applicable, specimen number of residual plasma aliquot (Last four digits): _____					
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]		Storage temperature of freezer: _____ °C			
<u>Buffy Coat</u>					
Buffy Coat aliquot #1 (last four digits): _____		Buffy Coat aliquot #2 (last four digits): _____			
Buffy Coat aliquot #1 Volume: _____ mL		Buffy Coat aliquot #2 Volume: _____ mL			
Buffy Coat aliquot #3 (last four digits): _____		Buffy Coat aliquot #4 (last four digits): _____			
Buffy Coat aliquot #3 Volume: _____ mL		Buffy Coat aliquot #4 Volume: _____ mL			
Time aliquots placed in freezer: 24 hour clock: _____ [HHMM]		Storage temperature of freezer: _____ °C			
Notes:					

Biological Sample and Shipment Notification Form: CSF

- Send by E-mail prior to shipment, and include a copy in each shipment
- REMINDER: PLEASE make sure this form is filled out completely by the person collecting the samples AND the person processing.

To: Kelley Faber		Email: alzstudy@iu.edu		Phone: 1-800-526-2839	
General Information:					
From: _____			Date: _____ [MM/DD/YYYY]		
Phone: _____			Email: _____		
Tracking #: _____					
NAPS2 Participant Study Information:					
NAPS2 ID: _____			GUID ID: _____		
Sex (circle one):		Male	Female	Year of Birth: _____	
Select one: <input type="checkbox"/> Case <input type="checkbox"/> Control					
Visit Information:					
CSF Collected? Yes No					Kit Barcode
Gauge needle used for LP (circle one): 22G 24 G					
Visit (circle one): Cycle 1 Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 7 Cycle 8					
Collection Process: Gravity Method Aspiration					(if aspiration method is used, it must be documented as a protocol violation)
CSF Collection:					
1. Date of Collection: _____ [MMDDYYYY]					
2. Time of Collection: 24 hour clock: _____ [HHMM]					
3. Date subject last ate: _____ [MMDDYYYY]					
4. Last time subject ate: 24 hour clock: _____ [HHMM]					
CSF Processing:					
Time Spint Started: 24 hour clock: _____ [HHMM]					
Duration of Centrifuge: _____ minutes					
Temperature of Centrifuge: _____ °C			Rate of Centrifuge: _____ xg		
Total Amount of CSF Collected: _____ mL					
Time Aliquoted: _____ [HHMM]					
Number of 0.5 mL CSF aliquots created (green cap): _____ x 0.5mL					
Number of 1.0 mL CSF aliquots created (orange cap): _____ x 1.0mL					
If applicable, volume of residual CSF aliquot (blue cap): _____ mL					
If applicable, specimen number of residual CSF aliquot: _____					
Time Frozen: _____ [HHMM]			Storage Temperature of Freezer: _____ °C		
Notes:					

Please email or fax the form on or prior to the date of shipment

To: Kelley Faber			Email: alzstudy@iu.edu			Phone: 1-800-526-2839		
General Information:								
From: Coordinator Name						Date: 05/08/2024 [MM/DD/YYYY]		
Phone: 111-111-1111						Email: CoordinatorEmail@email.com		
Tracking #: ABCDE123456789								
NAPS2 Participant Study Information:								
NAPS2 ID: NAPS2-00000						GUID ID: NDAR0000000		
Sex (circle one): Male			Female			Year of Birth: 1900		
Select one: <input checked="" type="checkbox"/> Case <input type="checkbox"/> Control								
Visit Information:								
CSF Collected? <input checked="" type="radio"/> Yes <input type="radio"/> No						Kit Barcode		
Gauge needle used for LP (circle one): 22G 24 G								
Visit (circle one): Cycle 1 Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 7 Cycle 8								
Collection Process: Gravity Method						Aspiration		
<small>(If aspiration method is used, it must be documented as a protocol violation)</small>								
CSF Collection:								
1. Date of Collection: 05/08/2024 [MMDDYYYY]								
2. Time of Collection: 24 hour clock: 0917 [HHMM]								
3. Date subject last ate: 05/07/2024 [MMDDYYYY]								
4. Last time subject ate: 24 hour clock: 1800 [HHMM]								
CSF Processing:								
Time Spint Started: 24 hour clock: 0925 [HHMM]								
Duration of Centrifuge: 10 minutes								
Temperature of Centrifuge: 4 °C						Rate of Centrifuge: 2000 xg		
Total Amount of CSF Collected: 30 mL								
Time Aliquoted: 0935 [HHMM]								
Number of 0.5 mL CSF aliquots created (green cap): 10 x 0.5mL								
Number of 1.0 mL CSF aliquots created (orange cap): 25 x 1.0mL								
If applicable, volume of residual CSF aliquot (blue cap): _____ mL								
If applicable, specimen number of residual CSF aliquot: _____								
Time Frozen: 0945 [HHMM]						Storage Temperature of Freezer: -80 °C		
Notes:								

NCRAD Website

NCRAD

National Centralized Repository for
Alzheimer's Disease and Related Dementias

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EMPOWERING RESEARCH WITH RELIABLE AND
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Study Resources

- 4RTNI-2
- 90+ STUDY
- ABC-DS
- ACAD
- ACE
- ADCFB
- ADNI-3,4
- AGMP
- ALLFTD
- APOE
- BBBSR

Study Resources (cont.)

- BENFOTEAM
- BEYONDD
- CADASIL
- CLARITI
- DIAN
- DMDC
- HALS
- OXICU K76
- HEAD
- LEADS
- MCS

Study Resources (cont.)

- NIA-AD FBS
- NAPS2**
- PACT
- PATH
- PSDC
- UW RETINAL
- VERI-T
- VIVA-MIND
- WRAP



NCRAD Website: NAPS2 Active Study Page

<https://ncrad.org/coordinate-studies/naps2>

Training videos, manual of procedures, and sample forms are available for reference on the NAPS2 Active Study Page.

[Home](#) / [Coordinate Studies](#) / [NAPS2](#)

NAPS2 ACTIVE STUDY PAGE

Welcome NAPS2 Study staff, coordinators, and PI's.

This section encompasses study specific tools and videos for your reference. If you have any questions, comments, or new ideas please contact NCRAD by **email** or phone **1-800-526-2839** or directly at **317-278-8413**.

SPECIMEN COLLECTION OVERVIEW

	VISIT 1	VISIT 2	VISIT 3	VISIT 4	VISIT 5
Serum	✓	✓	✓	✓	✓
Plasma	✓	✓	✓	✓	✓
Buffy Coat*	✓	✓	✓	✓	✓
RNA	✓	✓	✓	✓	✓
CSF*	✓	✓	✓	✓	✓

* CSF collection optional after visit 1

Study Resources

NCRAD Website: Friday Blood Draws

<https://ncrad.org/contact/friday-blood-draws>

WHAT TO DO FOR FRIDAY BLOOD DRAWS

NCRAD is not open for business on Saturday or Sunday; therefore, we ask that no samples be shipped on a Friday. We cannot guarantee the conditions in which the samples will be held by the shipping courier over the weekend. It is important to have plans in place for each type of sample to be held over the weekend prior to shipping. Please refer to the table below for how to handle samples drawn on a Friday.

When possible, please only ship frozen samples on Monday-Wednesday. There is always the potential for an unexpected shipping courier delay and by shipping Monday through Wednesday there should be enough time to receive the samples before the weekend

SAMPLE TYPE	TUBE TYPE	PRODUCT	SHIPMENT METHOD	FRIDAY DRAW INSTRUCTIONS
Whole Blood	Sodium Heparin	PBMC	Ambient	DO NOT DRAW ON FRIDAY. Must be drawn on Monday – Thursday.
Whole Blood	EDTA Tube	DNA Only	Ambient	Do NOT refrigerate. Please keep sample at room temperature until the specimen can be shipped via next day delivery methods the following Monday.
Whole Blood	EDTA Tube	DNA Only	Frozen	Whole blood in EDTA may be frozen in a -80°C freezer within 5 days of collection and shipped frozen on dry ice to NCRAD to remain within the stability window for DNA extraction.
Whole Blood	ACD Solution A Tube	Lymphoblastoid Cell Lines	Ambient	Do NOT refrigerate. Please keep sample at room temperature until the specimen can be shipped via next day delivery methods the following Monday.
Whole Blood	PAXgene™ Tube	RNA	Frozen	The PAXgene™ Tube must be placed on a wire rack and stored in a -80°C freezer. The sample may then be packaged with dry ice pellets and shipped as the study MOP dictates.
Cerebral Spinal Fluid	Polypropylene Aliquot Tubes	CSF	Frozen	CSF must be processed and aliquoted locally the day of collection. Once aliquoted, samples are stored upright in a -80°C freezer until shipment. The aliquots may then be packed with dry ice pellets and shipped as the study MOP dictates.
	Polypropylene			Plasma must be processed and aliquoted locally the day of collection. Once aliquoted, samples are stored upright in a -80°C freezer before shipment. The

HOLIDAY CLOSURES

DATE	HOLIDAY
January 1	New Year's Day
3 rd Monday in January	Martin Luther King, Jr Day
4 th Monday in May	Memorial Day
June 19	Juneteenth (observed)
July 4	Independence Day (observed)
1 st Monday in September	Labor Day
4 th Thursday in November	Thanksgiving
4 th Friday in November	Friday after Thanksgiving
December 25	Christmas

Please Note: between December 24th and January 2nd, Indiana University will be open Monday through Friday for essential operations ONLY and will re-open for normal operations on January 2nd. If at all possible, biological specimens for submission to Indiana University should NOT be collected and shipped to Indiana University after the second week of December. Should it be necessary to ship blood samples for DNA extraction to Indiana University during this period, please contact the Indiana University staff before December 20th by e-mailing alzstudy@iu.edu, so that they can arrange to have staff available to process incoming samples.

Please Note: Courier services may observe a different set of holidays. Please be sure to verify shipping dates with your courier prior to any holiday.

NCRAD Website: Holiday Closures

[https://ncrad.org
/contact/holiday-
closures](https://ncrad.org/contact/holiday-closures)

Contact Information

- Questions?

Please contact NCRAD Coordinators at:

- Phone: 1-800-526-2839 or 317-278-1133
- E-mail: alzstudy@iu.edu or agericks@iu.edu
- Website: www.ncrad.org