**MOM-le Study**

**VISIT 1 BLOOD SPECIMEN**

**(14.0 - 20 6/7 weeks gestation)**

**CRU Protocol #1331**

**Dr. Ann Borders Pager: (312) 695-1453**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Study ID Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**CRU Maternal Log Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Confirm that participant has **not** used steroids (not including inhalers) in last 2 weeks:

Confirm that participant has **not** experienced an illness, infection, or cold symptoms in last 2 weeks:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Assay** | **Tube** | **Comments from Phlebotomist** | **Research Assistant Directions** | **Aliquots** | **Comments from Lab Personnel** |
| **CRH** | 4 mL Purple-Top EDTA + Aprotinin |  | 1. Add Aprotinin to blood tube. 2. Transport tube to processing lab within 30 minutes of collection. | 1.5 mL in 2 mL cryovial |  |
| remainder in 2 mL cryovial |
| **Cortisol** | 10 mL Purple-Top EDTA |   | 1. Transport tube to processing lab within 30 minutes of collection. | 0.5 mL in 2 mL cryovial |   |
| **CRP/EBV** | 0.5 mL in 2 mL cryovial |   |
| 0.5 mL in 2 mL cryovial |
| **Cytokines** | 8 \* 0.1 mL (strip tube) |    |
|  0.750 mL (cryovial) |
| **DNA** | 8.5 mL Paxgene  |   | 1. Transport tube to processing lab within 30 minutes of collection. | no aliquots |   |

Date/Time of Blood Draw: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date/Time Specimen Received in Lab: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Specimen Received on Ice? YES / NO

Specimen Processed By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Cortisol, CRP/EBV and Cytokines (10mL EDTA Purple-Top Tube)

* Collect blood and gently invert tube 10 times to adequately mix blood with EDTA anticoagulant.

**Processing Sample:**

1. Adjust centrifuge to 3000rpm @ 40C and spin for 15 minutes.

**Aliquots (On Ice):**

1. Pipette 0.5mL of plasma into 3 of the 2mL cryovials.
2. Pipette 0.75mL of plasma into the fourth 2mL cryovial.
3. Pipette 8 X 0.1mL of plasma into the strip tube.
4. Store additional samples in extra 2mL cryovials (store locally).
5. Immediately store all vials in -80ᵒC freezer.
6. Store strip tubes in a small box with 96 x 0.2mL racks with lids.
7. Use extra fine alcohol resistant marker to label the side of each tube (tubes can break off the strip when frozen).
8. Place a sturdy rubber band around the lid and box.

# DNA (8.5mL Paxgene Tube)

* Collect blood and gently invert tube 10 times.
* No processing or aliquots necessary.

**Storage of Aliquots:**

1. Store Paxgene tubes using the styrofoam inserts and box in which they came.
2. Place at ~-20ᵒC for 24 hours and then store tubes in -80ᵒC freezer.
3. IMPORTANT: Place the box on its side when placed inside the freezer. Tubes may crack if upright.

# CRH (4mL EDTA Purple-Top Tube + Aprotinin)

* **Aprotinin aliquots will be prepared in advance.** (Aprotinin from SIGMA A1153-100mg    $462.00)
* Make Aprotinin on ice and aliquot on ice. Dilute in the original bottle with 5mls of sterile saline. Mix well. **Aliquot 35uL into each small 0.6mL tube for storage at -20ᵒC. Make sure to deliver liquid to bottom tube.**
* This gives you a concentration of 20mg/mL or 1mg/50ul or 6TIU/50ul. (We need 1TIU/ml blood).
* These aliquots can be stored for up to 1 year.

**On day of draw:**

1. Remove Aprotinin from freezer, put on ice, and take to clinic.
2. If aliquot is still frozen when needed, gently roll tube in gloved hands to defrost.
3. Collect blood and gently invert tube 10x to mix blood with EDTA anticoagulant.

Plasma

Buffy Coat

Red Cells

1. Pipette 33uL of Aprotinin protease inhibitor into tube.
2. Recap tube and gently invert tube 4x to mix blood with inhibitor.
3. Chill on ice until centrifugation.

**Processing Sample:**

1. Sample must be processed within 30 minutes of collection (if needed, sample can sit on ice for up to 1 hour).
2. Centrifuge at 3000rpm for 15 minutes at 4ᵒC.
3. Carefully remove tube from centrifuge as not to disturb buffy coat and note specimen color (yellow, pink or red).
4. Pipette 1.5mL of plasma (carefully so as not to disturb buffy coat) into the first 2mL cryovial and then pipette remainder into the second 2mL cryovial.
5. Immediately store all plasma cryovials in -80ᵒC freezer (or -20C if necessary).