Specimen Processing Checklist

LSOCA

Purpose: To evaluate cell (PBMC) specimen preparation. **When:** In preparation of a LSOCA clinical center site visit. **By whom:** SOCA certified laboratory technician.

A. Phlebotomy

- **1.** What do you do if the blood has clotted:
- 2. What do you do if the blood has hemolyzed:
- **3.** Is the blood centrifuged and processed within 4 hours of blood draw:

$$\begin{pmatrix} \text{Yes} \\ 1 \end{pmatrix} \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$$

B. PBMC Separation

4. Is the blood processed by the same technician(s) each time:

$$\binom{\text{Yes}}{1}$$
 $\binom{\text{No}}{2}$

5. Is the centrifuge calibrated regularly:

$$\binom{\text{No}}{1}$$
 $\binom{\text{No}}{2}$

6. When the density gradient is added, is the blood centrifuged at 800 x g for 20 minutes for PBMC separation:

$$\binom{\text{Yes}}{1}$$
 $\binom{\text{No}}{2}$

- 7. How are the PBMC counted:
 - **a.** Hemacytometer: $\begin{pmatrix} Yes \\ 1 \end{pmatrix}$ $\begin{pmatrix} No \\ 2 \end{pmatrix}$ **b.** Coulter counter: $\begin{pmatrix} Yes \\ 1 \end{pmatrix}$ $\begin{pmatrix} No \\ 2 \end{pmatrix}$
 - c. By hand/eye: Yes (1) (2)
 - **d.** Another electronic method: Yes $\binom{\text{No}}{1}$

8. During wash steps, is the sample centrifuged at 400 x g for 10 minutes:

 $\begin{array}{c} \text{Yes} \\ 1 \end{array} \qquad \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$

 $\binom{No}{2}$

- 9. Is the sample held for greater than 4 hours in refrigeration:
- **10.** Other

If yes, specify:

C. Cryo-preservation

11. Are the PBMC's cryo-preserved same day as the blood draw:

 $\begin{array}{c} \text{Yes} \\ 1 \end{array} \qquad \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$

Yes

12. Is the concentration of DMSO $\leq 10\%$ of specimen:

 $\begin{array}{c} \text{Yes} \\ 1 \end{array} \qquad \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$

Yes

13. Is the concentration of FCS 10%:

14. After separation, are the PBMC's immediately frozen:

 $\begin{array}{c} \text{Yes} \\ 1 \end{array} \qquad \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$

15. Is the rate of freezing equal to 1 degree per minute (i.e., -70 degrees C for 24 hours in a propanol bath):

$$\begin{pmatrix} \text{Yes} \\ 1 \end{pmatrix}$$
 $\begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$

(^{No}₂)

 $\begin{pmatrix} \text{Yes} \\ 1 \end{pmatrix}$

- If No, what is the rate:
- 16. Other

If yes, specify:

D. Storage

17. Are the PBMC's stored at -135 degrees C, or colder for long term storage:

$$\binom{\text{Yes}}{1}$$
 $\binom{\text{No}}{2}$

18. Are the freezers monitored daily to document fluctuations in temperatures:

$$\begin{array}{c} \text{Yes} \\ 1 \end{array} \qquad \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$$

19. Do the freezers have a liquid nitrogen back-up system:

$$\binom{\text{Yes}}{1}$$
 $\binom{\text{No}}{2}$

20. Are the cryovials submerged in liquid nitrogen for cyro-storage (Note: improper tubes may cause contamination):

(Yes No (,)

21. Other

If yes, specify:

If yes, specify:

22. Other

Yes 1)

(Yes

(Yes

E. Shipping

- 23. Are the PBMC's shipped on dry ice:
- 24. Is the bottom of the cyrovial avoided when handling the specimens for shipping:

$$\begin{pmatrix} \text{Yes} \\ 1 \end{pmatrix} \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$$

25. Are the cryovials packaged and prepped for shipping immediately so that the temperature of the cryovial is not jeopardized:

$$\begin{pmatrix} \text{Yes} \\ 1 \end{pmatrix} \begin{pmatrix} \text{No} \\ 2 \end{pmatrix}$$

26. Date form reviewed:

day mon year **27.** Laboratory technician ID: **28.** Laboratory technician signature: **29.** Clinic coordinator ID:

30. Clinic coordinator signature:

_ ____ _

No

(^{No}₂)

2)