

Specimen Processing Laboratory: _____

Participant ID (PTID): _____ Visit: _____ Protocol: _____

Collection Date: _____ Time: _____

Processing Start Date: _____ Time: _____ Processed By: _____

Reagents/Manufacturer	Lot Number			Expiration Date
DMSO (Manuf.: _____)				
FBS (Manuf.: _____)				
HBSS or other WDR (Manuf.: _____)				
Cell Separation Tube (Manuf.: _____)				
Density Gradient Media (Manuf.: _____)				
	Volume in mL			
CPS	CPS	DMSO	FBS	1 working day
Data to be Captured During Processing				Sample
Sample tube type (circle one)				NaHep / ACD / EDTA Other: _____
Blood condition (circle one or more)				NORM / HEMO/ CLOTTED
If indicated in protocol or processing instructions, harvest plasma prior to PBMC processing. Replace plasma volume with HBSS/WDR. Indicate harvesting.				Yes No
Usable whole blood volume				mL
Indicate processing method: Frit Barrier, Manual O/U-Lay or Buffy Coat Pooling				
Counting Method (name of instrument or manual count)				
Counting re-suspension volume of HBSS (or other WDR) (V)				mL
Cell count average concentration (C)				x 10 ⁶ cells/mL
Total cell number (T) = C x V				x 10 ⁶ cells
Calculate cell yield/mL of whole blood (QC check)= (T/Usable Whole Blood Volume)				x 10 ⁶ cells/mL
Calculate estimated CPS re-suspension vol. (V1)=(T/15x10 ⁶ cells/ml)(1mL)				mL
Calculate the final CPS re-suspension volume (V _f), rounded DOWN to the nearest whole mL				mL
Calculate actual number of cells per vial N2 = (T/V_f) x V2; (v2=1mL for most HVTN protocols).				x 10 ⁶ cells/vial
Freezing Date and Time (Explain in comments section if not within 4 hours of processing start time)				
Print and QC LDMS Label content/barcodes (initials of person performing QC)				
Number of cryovials actually frozen Note: Should be equal to freeze-down re-suspension volume for 1mL aliquots.				
Complete remaining LDMS entries including total cell count & freeze time.				

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Transfer of Cryovials to Freezer Storage	
Person who transferred cryovials to storage box locations assigned by LDMS	
Date (ddmmyyyy)/time cryovials were transferred from slow-rate cooling device to storage box. (Sample must be maintained at -70/-80°C during transfer)	
Final Review (Reviewer/date)	

Hemacytometer Counts	Total Count	Viable Cells	Non-Viable	
Square #1 (cells/mm ²)				
Square #2 (cells/mm ²)				
Square #3 (cells/mm ²)				
Square #4 (cells/mm ²)				
Average Cell Count per Square (cells/mm ²)				
PBMC Dilution Factor (1:DF*)				
Hemacytometer Factor for cells/mL	10 ⁴	10 ⁴	10 ⁴	
Cell count concentration (C) = (Average Cells/mm ²)(DF)(10 ⁴); convert to 10 ⁶ cells/mL	x 10 ⁶ cells/ml	x 10 ⁶ cells/ml	x 10 ⁶ cells/ml	
% viability = (viable cells/total cells)(100)	Not applicable		Not applicable	Not applicable

Automated Cell Counts (10 ³ /μl=10 ⁶ /mL)	Count #1			
Cell Count (C) as cells x 10 ⁶ /mL				
PBMC Dilution Factor (1:DF*)				
Cell Concentration = (C)(DF)	x 10 ⁶ cells/ml			

***Note:** Dilution Factor (DF) = (parts cells + parts dilution fluid)/ parts cells

Comments and Protocol Deviations: