Technical Data Sheet

NHP T Lymphocyte Cocktail

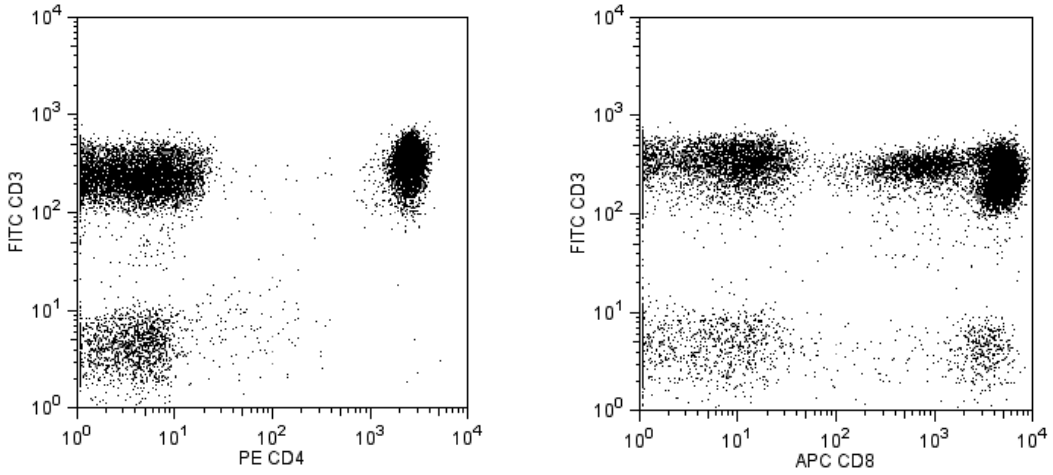
Product Information

Material Number:	**558625**
Size:	50 tests
Vol. per Test:	20 ul
Reactivity:	Human QC Testing: Rhesus, or Baboon, or Cynomolgus.
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

Description

Cocktail Component	Clone	Isotype
APC anti-Human CD8	SK1	mIgG1
PE anti-Human CD4	L200	mIgG1
FITC anti-Human CD3	SP34-2	mIgG1

The NHP T Lymphocyte Cocktail is a three-color reagent cocktail designed to identify NHP T lymphocytes by direct immunofluorescence staining with flow cytometric analysis. The SK1 antibody reacts with the hinge-like membrane-proximal domain of the 32-kDa alpha chain of the CD8 differentiation antigen.. The CD8α and β chains (CD8a and CD8b, respectively) form a heterodimer on the surface of most thymocytes and a subpopuplation of mature T-lymphocytes (ie, MHC class I-restricted T cells, including most T suppressor/cytotoxic cells). The L200 antibody reacts with the human form of the 56 kDa transmembrane glycoprotein, CD4, present on the T-helper/inducer subset of normal human donor peripheral blood lymphocytes. L200 antibody also cross-reacts with a subset of CD3-positive peripheral blood lymphocytes, but not monocytes, of both rhesus and cynomolgus macaque monkeys. Cross-reactivity on both lymphocytes and monocytes (weak) of baboon is also observed. The distribution on lymphocytes is similar for both human and monkey, with the majority of CD4-positive lymphocytes being CD8-negative and lacking reactivity with antibodies to B- or NK-cell markers. The SP34-2 antibody reacts with the T-cell receptor-associated CD3 cell-surface antigen found on thymocytes and peripheral T lymphocytes. Clone SP34-2 is a mouse IgG1 isotype monoclonal antibody, descendant of SP34 (mouse IgG3), with the same specificity and reactivity pattern as the parent clone. It cross-reacts with a major subset of peripheral blood lymphocytes, but not monocytes or granulocytes, of baboon, and rhesus, cynomolgus, and pigtail macaque monkeys.



Three-color analysis of the expression of CD3, CD4, and CD8 on lysed whole blood from Rhesus monkey. *PBMC from Rhesus monkey was stained with either Isotype Control Cocktail C (Cat. no. 558659; data not shown) or NHP T Lymphocyte Cocktail (Cat. no. 558625). During data analysis, lymphocytes were identified by scatter profile and CD45 expression. The figure on the left represents the CD3 and CD4 profile while the figure on the right represents the CD3 and CD8 profile. Flow cytometry was performed on a BD FACSCalibur™.*

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Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
558640	NHP Compensation Set	20 tests	(none)
558659	Ig Isotype Control Cocktail - C	20 tests	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. This conjugated product is sold under license to the following patents: US Patent No. 5,798,276.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Schlossman SF, Boumsell L, Gilks W, et al, ed. *Leukocyte Typing V: White Cell Differentiation Antigens.* New York: Oxford University Press; 1995. (Biology)