

BD Multitest 6-Color TBNK Reagent

More answers from a single tube

Features

- Available with and without BD Trucount™ tubes
- Performs lymphocyte enumeration of mature T, B, and NK cells in a single tube
- Works in a fully integrated system with BD FACSTM Sample Prep Assistant (SPA) for automated lyse/no-wash sample preparation
- Can be used with the BD FACSTM Loader for automated sample acquisition on a BD FACSCanto™ instrument
- Works with BD FACSCanto™ clinical software for instrument setup, QC, acquisition, and analysis with built-in templates

Antibodies

The BD Multitest 6-color TBNK reagent contains the following antibodies to identify and enumerate the different (T, B, and NK) lymphocyte subsets:

- CD3 FITC for the identification of T lymphocytes
- CD16 and CD56 PE for identifying NK lymphocytes
- CD45 PerCP-Cy™5.5 to allow for gating on the lymphocyte populations
- CD4 PE-Cy™7 for detecting T helper/inducer lymphocytes
- CD19 APC to identify B lymphocytes
- CD8 APC-Cy7 for the identification of the suppressor/cytotoxic T lymphocyte subset

BD Multitest™ 6-color TBNK reagent provides a reliable, cost effective, and easy-to-use solution for multicolor flow cytometric analysis of lymphocyte subsets.

The BD Multitest 6-color TBNK reagent (50 tests) determines absolute counts and percentages of mature T, B, and NK lymphocyte populations as well as CD4⁺ and CD8⁺ T-cell subset ratios in human peripheral blood, all in a single tube.

Percentages and absolute counts of T and B lymphocytes and ratio of helper/inducer versus suppressor/cytotoxic T cells provide valuable information on immune status for a number of patient conditions. CD4⁺ helper/inducer T lymphocyte counts are used for monitoring disease progression and therapy efficiency in Human Immunodeficiency Virus (HIV)-infected individuals.¹ Certain forms of autoimmunity have been related to percentages of CD8⁺ suppressor/cytotoxic T lymphocytes that lie outside the normal reference range.² NK lymphocytes have been shown to mediate cytotoxicity against certain tumors and virus-infected cells.

The TBNK reagent defines NK cells by analyzing the expression of the CD16 and CD56 simultaneously using the same conjugation to allow for a more precise diagnosis than using the CD56 marker only.³

An easy-to-use solution

With its single-tube format, the BD Multitest 6-color TBNK reagent considerably reduces sample processing time. The reagent includes a cocktail of multiple fluorescently labeled monoclonal antibodies, premixed at the appropriate titer to ensure quality staining.

Simple procedure

1. Add whole blood to a 12 x 75-mm BD Falcon™ polystyrene tube or BD Trucount tube.
2. Add BD Multitest 6-color TBNK reagent, vortex, and incubate.
3. Add BD FACSTM lysing solution and incubate.
4. Acquire and analyze with BD FACSCanto clinical software.

Improve safety, reduce hands-on time

The BD 6-color TBNK reagent employs a no-wash formula that simplifies sample preparation and reduces tube handling. Processing fewer tubes in less time may decrease potential exposure to biohazardous material, improving safety for laboratory personnel.

Increase productivity

Multicolor analysis provides more answers from a single tube and decreases costs by reducing the number of tubes and reagents required. Together with the BD FACSCanto or BD FACSCanto™ II flow cytometer and BD FACSCanto clinical software, the Loader option and the SPA, the BD Multitest 6-color TBNK reagent provides high performance for lymphocyte enumeration to best suit your routine immunophenotyping needs. BD FACSTM 7-color setup beads enable fast and convenient fully automated instrument setup.

Visit bdbiosciences.com for more information.



BD Multitest 6-Color TBNK Reagent with BD Trucount Tubes

Absolute counts of multiple lymphocyte subsets from a single tube. As easy as 1-2-3.



Featuring a convenient lyse/no-wash procedure together with established BD Trucount™ bead technology, the BD Multitest 6-color TBNK reagent with BD Trucount tubes brings you the most efficient approach to routine multicolor flow cytometric immunophenotyping yet available.

Accurate cell counts with BD Trucount tubes

BD Trucount tubes ensure more accurate cell counts. The tubes contain a lyophilized pellet of fluorescent beads that serves as an internal standard. BD FACSCanto clinical software (v2.0 or later) automatically calculates lymphocyte absolute counts and subset percentages (Figure 1).

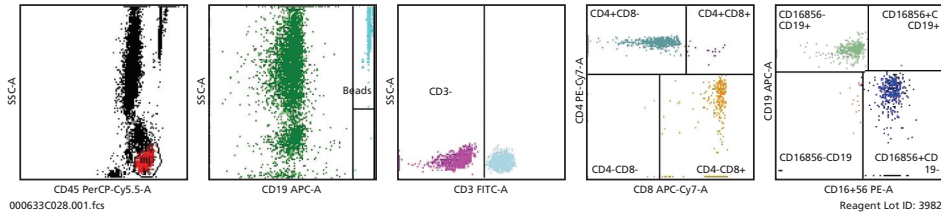
P100721V02 07		
Director: RV/TF		
Panel: 6 Color TBNK + TruC		
Acquired: 07/21/2005 4:13:20 PM		
Analyzed: 10/18/2005 11:08:05 AM		
TruC Lot ID: 11806		
Bead/Pellet: 49945		
Status: OK		
Operator: SS		
Reviewer:		
Results: 18102005.csv		
Parameter	Column # 2:	Column # 3:

BD FACSCanto V0002

BD FACSCanto v.20

CD3/CD16+56/CD45/CD4/CD19/CD8 TruC

Total Events: 10068



Parameter	Percent	Value/AbsCnt
Lymph Events		2714
Bead Events		1544
CD3+	66.76	1171.51
CD3+CD8+	14.41	252.79
CD3+CD4+	52.51	921.30
CD3+CD4+CD8+	0.63	10.99
CD16+CD56+	16.80	294.82
CD19+	15.84	278.01
CD45+		1754.68
4/8 Ratio		3.64

QC Messages

% T-Sum is: 0.16
Lymphosum is: 99.40
4/8 ratio is: 3.64

Figure 1. Example of data from a BD FACSCanto laboratory report obtained for a BD Multitest 6-color TBNK assay with BD Trucount tubes.

Ordering Information

Description	Apps	Reg	Size	Cat.No.
BD Multitest™ 6-color TBNK Reagent with BD Trucount Tubes	FCM	IVD	50 tests	337166

BD Multitest 6-Color TBNK Reagent without BD Trucount Tubes

Reagents tailored to your analysis needs



BD Multitest 6-color TBNK reagent is now also available without BD Trucount tubes. BD FACSCanto clinical software (v2.4) calculates lymphocyte subset percentages directly from the sample flow data (Figure 2).

Quality you can count on

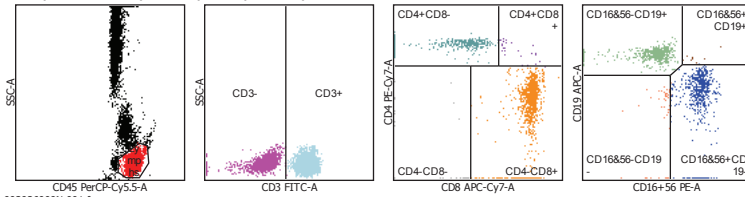
BD reagents are manufactured and tested to meet our high standards of purity, stability, low background, and lot-to-lot consistency. Expect high quality, accurate results, and a performance level equal to the BD Multitest 6-color TBNK reagent with BD Trucount tubes option.

003936		Panel:	6 Color TBNK
Director: KH		Acquired:	12/3/2008 3:28:56 PM
		Analyzed:	12/3/2008 3:28:56 PM
		Status:	OK
		Operator:	PL
		Reviewer:	
		Results:	03122008.csv

WBC Count (x1000) Lymphs (%): Lymphs (x1000):
 BD FACSCanto II V96300005 BD FACSCanto v.2.4.3365.10840

CD3/CD16+56/CD45/CD4/CD19/CD8

Total Events: 10045



Reagent Lot ID: 24771

Parameter	Percent	Value/AbsCnt
Lymph Events		4984
CD3+	74.04	0
CD3+CD8+	34.13	0
CD3+CD4+	39.35	0
CD3+CD4+CD8+	0.50	0
CD16+CD56+	11.96	0
CD19+	12.90	0
CD45+		0
4/8 Ratio		1.15

QC Messages

% T-Sum is: 0.56
 Lymphosum is: 98.90
 4/8 ratio is: 1.15

Figure 2. Example of data from a BD FACSCanto laboratory report obtained for a BD Multitest 6-color TBNK assay without BD Trucount tubes.

Ordering Information

Description	Apps	Reg	Size	Cat.No.
BD Multitest 6-color TBNK Reagent without BD Trucount Tubes	FCM	IVD	50 tests	644611

Note: The BD Multitest 6-color TBNK reagent without BD Trucount tubes is used on the BD FACSCanto and BD FACSCanto II systems with BD FACSCanto software v2.4 and later.

BD Multitest 6-Color TBNK Reagent

References:

1. Giorgi JV, Detels, R. T-cell subset alterations in HIV-infected homosexual men: NIAID Multicenter AIDS cohort study. *Clin Immunol Immunopathol.* 1989;52:10-18.
2. Antel J, Bania M, Noronha A, Neely S. Defective suppressor cell function mediated by T8+ cell lines from patients with progressive multiple sclerosis. *J Immunol.* 1986;137:3436-3439.
3. Brunetta E, Fogli M, Varchetta S, Bozzo L, et al. The decreased expression of Siglec-7 represents an early marker of dysfunctional natural killer-cell subsets associated with high levels of HIV-1 viremia. *Blood.* 2009;114:3822-3830.



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