



## Treg 调节性 T 细胞检测试剂盒 ( FOXP3 PE/CD4 FITC/CD25 APC )

### Anti-Human Treg Flow Kit (FOXP3 PE/CD4 FITC/CD25 APC)

Catalog No.: BFK001

Size: 25T

#### Materials Provided:

Cat No.	Product	Size	Storage
BFK001-1	FITC anti-human CD4	250ul	2°C and 8°C. Do not freeze. (12months)
BFK001-2	FITC mouse IgG2b Isotype Control	100ul (10T)	2°C and 8°C. Do not freeze. (12months)
BFK001-3	APC anti-human CD25	250ul	2°C and 8°C. Do not freeze. (12months)
BFK001-4	APC mouse IgG2a Isotype Control	100ul (10T)	2°C and 8°C. Do not freeze. (12months)
BFK001-5	PE Anti-human FOXP3	250ul	2°C and 8°C. Do not freeze. (12months)
BFK001-6	PE mouse IgG1 K Isotype Control	100ul (10T)	2°C and 8°C. Do not freeze. (12months)
BFK001-7	Foxp3/Transcription Factor Fixation/Permeabilization Buffer Set	A buffer: 2x25ml B buffer: 25ml C buffer (10X) : 31.5ml	RT,6months
BFK001-8	Cell Staining Buffer	10ml	2°C and 8°C. Do not freeze. (12months)

#### Description:

T regulatory (Treg) cells are a subset of T lymphocytes which is characterized by CD4+/CD25+/FOXP3+. These naturally occurring Treg cells originate in the thymus, and comprise 2-10% of peripheral CD4+ T cells. It has been shown that Treg cells are able to inhibit T cells proliferation and cytokine production and play critical roles in preventing autoimmunity as well as in controlling tumor immunity and transplantation tolerance. Impaired Treg function or Treg cell deficiency will develop variety of autoimmune diseases, while higher frequency of Treg cells will cause hypo-immune response to pathogens.

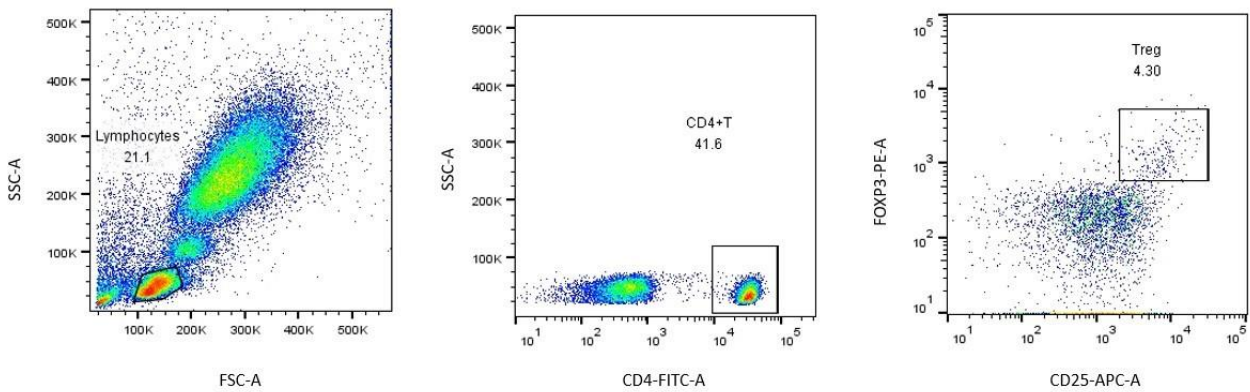
#### Experimental Methods:

**(The following is a general protocol, optimization is required for best results of your experiment. Please contact us by email or by phone for further technical support.)**

1. The C buffer(10X) must be freshly diluted to 1X working solution with ddH<sub>2</sub>O prior to staining procedures. e.g. Dilute one (1) part C buffer (10X) to nine (9) parts ddH<sub>2</sub>O;
2. Take 100µl peripheral blood anticoagulated by EDTA and add to the bottom of 5ml tube;
3. Add 10µl FITC anti-human CD4 and 10µl APC anti-human CD25 antibody to the bottom of flow tube mixing with the peripheral blood, incubate for 20 minutes at room temperature away from light;
4. Add 2ml A buffer mixing, incubate for 10 minutes at room temperature away from light;
5. Sample tube is set to 400g centrifugation for 5 minutes, discard the supernatant;

6. Add 2ml C buffer mixing, sample tube is set to 400g centrifugation for 5 minutes, discard the supernatant;
7. Add 2ml C buffer mixing, sample tube is set to 400g centrifugation for 5 minutes, discard the supernatant;
8. Add 1ml B buffer mixing, incubate for 60 minutes at room temperature away from light;
9. Add 2ml C buffer mixing, sample tube is set to 400g centrifugation for 5 minutes, discard the supernatant;
10. Add 2ml C buffer mixing, sample tube is set to 400g centrifugation for 5 minutes, discard the supernatant;
11. Add 50ul Cell Staining Buffer
12. Add 10µl PE anti-human foxP3 mixing,incubate for 60 minutes at room temperature away from light;
13. Add 2ml C buffer mixing, sample tube is set to 400g centrifugation for 5 minutes, discard the supernatant;
14. Add 2ml C buffer mixing, sample tube is set to 400g centrifugation for 5 minutes, discard the supernatant;
15. Add 0.5ml C buffer then analyze with flow cytometer with appropriate instrument setting.

**Experimental Data :**



Human healthy peripheral blood were stained with FITC anti-human CD4 (Cat#BFK001-01) and APC anti-human CD25 (Cat#BFK001-03) simultaneously. Cells were fixed and permeabilized followed by intracellular staining with PE anti- human FOXP3 (Cat#BFK001-05) .Flow Cytometry was performed using a NovoCyte system.