



# Kappa Light Chain (F'ab 2 Polyclonal)

	REF	$\Sigma$		[A]	
PURE	KAPPAF3PU	1 mg	10 $\mu$ L/test	1 mg/ml	
APC	KA3-100T	100 test	20 $\mu$ L/test	0,05 mg/ml	<b>RUO</b>
CF-BLUE	KCFB-100T	100 test	5 $\mu$ L/test	0,2 mg/ml	
PE	KPE3-X-100T	100 test	10 $\mu$ L/test	0,1 mg/ml	

## 1. PRODUCT DESCRIPTION

**Clone:** Polyclonal;

**Isotype:** Rabbit F(ab')<sub>2</sub> IgG;

**Tested application:** flow cytometry;

**Immunogen:** Polyclonal immunoglobulin light chains of kappa type isolated from a pool of human sera for Rabbit Anti-Human Kappa Light Chains;

**Species reactivity:** Human;

**Storage instruction:** store in the dark at 2-8 °C;

**Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>);

**Recommended usage:** Immunostep's kappa F'ab 2, is intended for simultaneous detection and enumeration of B lymphocytes bearing kappa light chains in peripheral blood using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 10  $\mu$ l/10<sup>6</sup> cells;

**Presentation:** liquid;

**Source:** Supernatant proceeding from sera for Rabbit Anti-Human Kappa Light Chains;

**Purification:** Affinity chromatography;

**Other names:** T Cell Receptor beta; TCRB; TRB; TRB@; TCR VB3-CB1;

**Gene ID:** 28639.

**Molecular weight:** 34 kDa.

## 2. ANTIGEN DETAILS

**Large description:** The evaluation of cell surface Kappa/Lambda expression can identify clonally restricted B lymphocyte populations and thus can aide in the diagnosis of hematologic malignancy. Several B cell disorders are associated with decreased levels of Kappa/Lambda at the cell surface<sup>(1-4)</sup>.

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

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## 5. PROTOCOL

### Direct Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100  $\mu$ l (10<sup>6</sup> cells/test) of the sample to a 12 x 75 mm polystyrene test tube.
2. Add the suggested volume indicated on the antibody vial to the 12x75 mm cytometer tube.
3. Mix well and incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. After the incubation period, add 1,5 ml of an erythrocyte-lysing solution and mix. Incubate at room temperature in the darkness (the blood should be well mixed with the lysing solution).
5. Centrifuge tubes at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
6. Resuspend and wash with 3-5 mL of PBS at 540xg for 5 min.
7. After removing the supernatant and resuspending the cell pellet, add 300  $\mu$ L of PBS and acquire on the flow cytometer are recorded.
8. Analyse on a flow cytometer or store at 2- 8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.





### Indirect Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100  $\mu$ l (10<sup>6</sup> cells/test) of the sample to a 12 x 75 mm polystyrene test tube
2. Add purified reagent according to manufacturer's recommendation and mix gently with a vortex mixer.
3. Incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. Add 2 mL 0.01 mol/L PBS (It betters that it containing 2% bovine serum albumin) and resuspend the cells by using a vortex mixer. Centrifuge at 540xg for 5 min in order to remove the McAb not bound to its antigen.
5. Add a secondary conjugated reagent with some fluorochrome and mix. Incubate at room temperature for 15 min in the dark. The absence of light is necessary as the fluorochrome is photoinstability.
6. After the incubation period, add 1,5 ml of an erythrocyte-lysing solution and mix. Incubate at room temperature in the darkness (the blood should be well mixed with the lysing solution). Centrifuge at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
7. Resuspend and a made a final wash with 3-5 mL of PBS at 540xg for 5 min.
8. After removing the supernatant and resuspending the cell pellet, add 300  $\mu$ L of PBS and acquire on the flow cytometer are recorded.
9. Analyse on a flow cytometer or store at 2- 8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.

## 6. REFERENCES

1. Gandini D, Lanza F, Latorraca A, Levato F, Del Senno L, Castoldi G. Immunophenotypic and genotypic characterization of B-cell chronic lymphocytic leukemia patients from northern Italy. *Haematologica*1993 Jan-Feb;78(1):18-24.
2. Johnson A, Olofsson T. Flow cytometric clonal excess analysis of peripheral blood, routine handling, and pitfalls in interpretation. *Cytometry*1993;14(2):188-95.
3. Cartron G, Linassier C, Bremond JL, Desablens B, Georget MT, Fimbel B, et al. CD5 negative B-cell chronic lymphocytic leukemia: clinical and biological features of 42 cases. *Leuk Lymphoma*1998 Sep;31(1-2):209-16.
4. Braylan RC, Orfao A, Borowitz MJ, Davis BH. Optimal number of reagents required to evaluate hematology neoplasias: results of an international consensus meeting. *Cytometry*2001 Feb 15;46(1):23-7.

## 7. EXPLANATION OF SYMBOLS

	Form
<b>REF</b>	Catalog reference
$\Sigma$	Contains sufficient for > test
	Quantity per test
	Regulatory Status
<b>RUO</b>	Research Use Only
<b>[A]</b>	Concentration
	Manufacturer

## 8. MANUFACTURED BY:

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