**Anti-Kappa F(ab’)_2**

**Form** | **Catalog number**
---|---
FITC | 348063

Product availability varies by region. Contact BD Biosciences Customer Support or your local sales representative for information.

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**RESEARCH APPLICATIONS**

Research applications* include studies of:
- Identification of B lymphocytes bearing kappa light chains in peripheral blood¹-¹⁰
- Clonality¹, ⁴, ⁶, ⁸

**DESCRIPTION**

**Specificity**

The Anti-Kappa F(ab’)₂ FITC† polyclonal antibody is specific for kappa light chains of human immunoglobulins.¹¹

**Antigen distribution**

Immunoglobulins bearing kappa light chains are present on approximately 50% of normal B lymphocytes¹-⁴ and on Igκ⁺ leukemic and lymphoma cells.¹⁻⁹ In serum, Anti-Kappa F(ab’)₂ FITC reacts with immunoglobulins bearing kappa light chains as well as free kappa light chains.

**Source**

The Anti-Kappa F(ab’)₂ FITC antibody is derived from pooled antisera obtained from hyperimmunized goats and is purified by affinity chromatography. It is provided as F(ab’)₂ fragments.

**Composition**

The Anti-Kappa F(ab’)₂ FITC antibody is composed of goat F(ab’)₂ heavy chain fragments and goat light chains.

**Product configuration**

The following reagent is supplied in phosphate buffered saline (PBS) containing a stabilizer and a preservative.

<table>
<thead>
<tr>
<th>Form</th>
<th>Number of tests</th>
<th>Volume per test (µL)ᵃ</th>
<th>Amount provided (µg)</th>
<th>Total volume (mL)</th>
<th>Concentration (µg/mL)</th>
<th>Stabilizer</th>
<th>Preservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITC</td>
<td>50</td>
<td>20</td>
<td>Lot-specific</td>
<td>1</td>
<td>See product label</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

ᵃ. Volume required to stain 10⁶ cells.

**PROCEDURE**

Visit our website (bdbiosciences.com) or contact your local BD representative for the lyse/wash protocol for direct immunofluorescence.

1. Add 20 µL of reagent to 10⁶ peripheral blood mononuclear cells (PBMCs) in 50 µL of medium containing 0.1% sodium azide.
2. Mix thoroughly and incubate for 15 to 30 minutes in the dark at 2°C–8°C.
3. Wash with 1X PBS with 0.1% sodium azide.

* The published methods in the cited references have not been developed or tested by BD.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.
4. Add 0.5 mL of 1% paraformaldehyde, mix thoroughly, and analyze.

If samples are not analyzed immediately, mix thoroughly just before analysis.

**CAUTION** Do not use Anti-Kappa F(ab')₂ FITC to stain leucocytes in serum, plasma, or whole blood as the reagent reacts with immunoglobulin (Ig). Anti-Kappa F(ab')₂ FITC also reacts with cytophilic Ig bound to cells with Fc receptors, such as monocytes, B lymphocytes, and natural killer (NK) lymphocytes. The amount of cytophilic staining varies between donors, and can be influenced by monocytes present in the lymphocyte gate, relative percentage of NK lymphocytes, and presence of Ig in the donor plasma.

**REPRESENTATIVE DATA**

Flow cytometric analysis was performed on PBMCs with scatter gates set on the lymphocyte fraction. Laser excitation was at 488 nm. Representative data analyzed with a BD FACSTM brand flow cytometer is shown in the following figure.

**Figure 1** Single parameter display of peripheral blood lymphocytes analyzed with a BD FACScan™ flow cytometer

[Graph showing Autofluorescence and Anti-Kappa F(ab')₂ FITC, with a relative number of cells at +11%]

**HANDLING AND STORAGE**

Store vials at 2°C–8°C. Conjugated forms should not be frozen. Protect from exposure to light. Each reagent is stable until the expiration date shown on the bottle label when stored as directed.

**WARNING**

All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection12,13 and dispose of with proper precautions in accordance with federal, state, and local regulations. Never pipette by mouth. Wear suitable protective clothing, eyewear, and gloves.

**CHARACTERIZATION**

To ensure consistently high-quality reagents, each lot of antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.

**WARRANTY**

Unless otherwise indicated in any applicable BD general conditions of sale for non-US customers, the following warranty applies to the purchase of these products.

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**REFERENCES**


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