

# Monoclonal

## Anti-mouse Lymphotoxin βR/TNFRSF3-PE

Catalog Number: FAB10081P Lot Number: ABHZ01

100 Tests

#### **Reagents Provided**

Phycoerythrin (PE)-conjugated rat monoclonal anti-mouse Lymphotoxin  $\beta$ R/TNFRSF3: Supplied as 50  $\mu$ g of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: 157108 Isotype: rat IgG<sub>2A</sub>

#### **Reagents Not Provided**

 Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

#### **Storage**

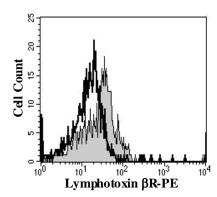
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at  $2^{\circ}$  -  $8^{\circ}$  C.

#### Intended Use

Designed to quantitatively determine the percentage of cells bearing Lymphotoxin  $\beta R/TNFRSF3$  within a population and qualitatively determine the density of Lymphotoxin  $\beta R/TNFRSF3$  on cell surfaces by flow cytometry.

#### **Product Description**

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, NS0-derived, recombinant mouse Lymphotoxin beta receptor (rmLymphotoxin  $\beta R$ ) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to PE fluorochrome. Cell surface expression of Lymphotoxin  $\beta R/TNFRSF3$  is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 565 - 605 nm.



Mouse whole blood monocytes were stained with PE-conjugated anti-mouse Lymphotoxin  $\beta$ R/TNFRSF3 (Catalog # FAB10081P, filled histogram) or isotype control (Catalog # IC006P, open histogram).

#### **Background Information**

Lymphotoxin  $\beta R$  is a member of the TNF receptor superfamily and is now designated TNFRSF3. Lymphotoxin  $\beta R$  transduces signals following binding of LIGHT or the heterotrimeric Lymphotoxins LT $\alpha$ 1/ $\beta$ 2 or LT $\alpha$ 2/ $\beta$ 1. It plays a critical role in controlling cellular immune functions and lymphoid organogenesis.

### Flow Cytometry Validation

This antibody has been tested for flow cytometry using mouse whole blood monocytes.

- 1. Cells may be Fc-blocked with 1  $\mu$ g of mouse IgG/10 $^5$  cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- 2. After blocking, 10  $\mu$ L of conjugated antibody was added to 1 2.5 x 10 $^{5}$  cells and incubated for 30 minutes at room temperature.
- Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Mouse Lyse Buffer (Catalog # FC003).
- 4. The cells were resuspended in Flow Cytometry Staining Buffer for final flow cytometric analysis. As a control for this analysis, cells in a separate tube should be treated with PE-labeled rat IgG<sub>2A</sub> antibody. This procedure may need to be modified, depending upon the cell type and final utilization. Individual users may need to titrate to determine the optimal reagent amount for their specific use.

**Warning**: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.