



# Monoclonal Anti-human FCRLB/FCRY Antibody

## ORDERING INFORMATION

**Catalog Number:** MAB4705

**Clone:** 454217

**Lot Number:** ZVZ01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human FCRLB

**Immunogen:** NS0-derived rhFCRLB

**Ig class:** mouse IgG<sub>2b</sub>

### Recommended Applications:

Flow cytometry  
Western blot

### Other Application:

Direct ELISA

## Background

Fc receptor-like 2 (FCRLB), also known as FCRY and FREB2, is a 57 kDa protein that is structurally related to receptors for immunoglobulin Fc regions. It is a potentially secreted molecule that contains three Ig-like domains and a mucin-like domain. FCRLB is expressed in placenta and by several B cell populations. Within the ECD, human FCRLB shares 82% and 85% aa sequence identity with mouse and rat FCRLB, respectively.

## Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human FCRLB (rhFCRLB; aa 18 - 426; Accession # Q6BAA4). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography

## Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

## Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

## Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

## Specificity

This antibody detects rhFCRLB in Western blots and direct ELISAs.

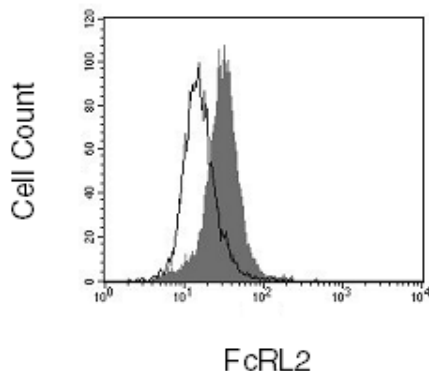
## Applications

**Flow cytometry** - This antibody was tested for flow cytometry using Daudi cells. For intracellular staining to detect FCRLB, cells must first be fixed and permeabilized using 4% paraformaldehyde and ice-cold methanol. Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding a secondary developing reagent such as anti-mouse IgG conjugated to a fluorochrome.

**Western blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human FCRLB. Using a colorimetric detection system, the detection limit for rhFCRLB is approximately 10 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection will increase sensitivity by 5 to 50 fold.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human FCRLB. The detection limit for rhFCRLB is approximately 2 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**



Daudi cells were stained with anti-FCRLB (R&D Systems, Cat. # MAB4705) or isotype control (R&D Systems, Cat. # MAB0041, open histogram) followed by PE-conjugated anti-mouse antibody (R&D Systems, Cat. # F0102B).

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