

PE anti-human CD45RB

Catalog # / Size: 310204 / 100 tests

Clone: MEM-55

Isotype: Mouse IgG2b, κ

Workshop Number: V CD45.08

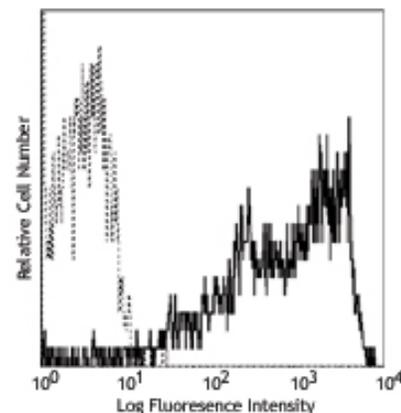
Immunogen: Human thymocytes and T lymphocytes

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with MEM-55 PE

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 μ l to 5 μ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 μ l staining volume or per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

Application Notes: The MEM-55 antibody is specific for a glycosylated-CD45RB epitope that is highly expressed on memory B cells and plasmablasts but not on naive B cells. Additional reported applications (for the relevant formats) include: immunoprecipitation, Western blotting, and immunohistochemical staining of formalin-fixed paraffin-embedded tissue sections.

Application References:

- Horejsi V, *et al.* 1988. *Folia Biol.* 34:23.
- Bazil V, *et al.* 1989. *Immunogenetics* 29:202.
- Knapp W, *et al.* 1989. *Leucocyte Typing IV.* Oxford University Press. New York.
- Schlossman S, *et al.* Eds. 1995. *Leucocyte Typing V.* Oxford University Press. New York.
- Koethe S, *et al.* 2011. *J. Leukoc. Biol.* 90:5.

Description: CD45RB is a 180-240 kD single chain type I membrane glycoprotein. It is an exon 5 splice variant of the tyrosine phosphatase CD45. The CD45RB isoform is expressed on thymocytes, T cell subsets, B cells, monocytes/macrophages, granulocytes, and dendritic cells. CD45RB enhances both T cell receptor and B cell receptor signaling mediated activation. CD45 and its isoforms non-covalently associate with lymphocyte phosphatase-associated phosphoprotein (LPAP) on T and B lymphocytes. CD45 has been reported to be associated with several other cell surface antigens including CD1, CD2, CD3, and CD4. CD45 has also been reported to bind galectin-1. CD45 isoform expression can change in response to cytokines. The MEM-55 antibody recognizes a silaidase-sensitive epitope of CD45.

Antigen References:

- Thomas M. 1989. *Annu. Rev. Immunol.* 7:339.
- Trowbridge I, *et al.* 1994. *Annu. Rev. Immunol.* 12:85.

Related Products:

| Product | Clone | Application |
|---|--------|---------------|
| PE anti-human CD45RA | HI100 | FC |
| PE anti-human CD45 | HI30 | FC |
| PE anti-human CD45RO | UCHL1 | FC |
| PE Mouse IgG2b, κ Isotype Ctrl | MPC-11 | FC, ICFC |
| Cell Staining Buffer | | FC, ICC, ICFC |
| RBC Lysis Buffer (10X) | | FC, ICFC |
| Human TruStain FcX™ (Fc Receptor Blocking Solution) | | FC, ICC, ICFC |



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