

Product Data Sheet

PE anti-human CD45RB

Catalog # / Size: 310204 / 100 tests

Clone: MEM-55

Isotype: Mouse IgG2b, κ

Workshop Number: V CD45.08

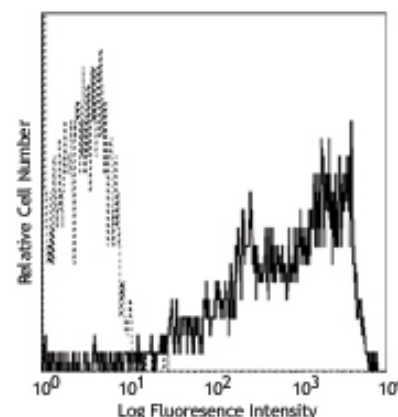
Immunogen: Human thymocytes and T lymphocytes

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 naïve 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:

1. Horejsi V, *et al.* 1988. *Folia Biol.* 34:23.
2. Bazil V, *et al.* 1989. *Immunogenetics* 29:202.
3. Knapp W, *et al.* 1989. *Leucocyte Typing IV*. Oxford University Press. New York.
4. Schlossman S, *et al.* Eds. 1995. *Leucocyte Typing V*. Oxford University Press. New York.
5. 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:

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

Related Products:

Product
 PE anti-human CD45RA
 PE anti-human CD45
 PE anti-human CD45RO
 PE Mouse IgG2b, κ Isotype Ctrl
 Cell Staining Buffer
 RBC Lysis Buffer (10X)
 Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone

HI100
 HI30
 UCHL1
 MPC-11

Application

FC
 FC
 FC
 FC, ICFC
 FC, ICC, ICFC
 FC, ICFC
 FC, ICC, ICFC



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.