

Product Data Sheet

Purified anti-human CD45RB

Catalog # / Size: 310202 / 100 µg

Clone: MEM-55

Isotype: Mouse IgG2b, κ

Workshop Number: V CD45.08

Immunogen: Human thymocytes and T lymphocytes

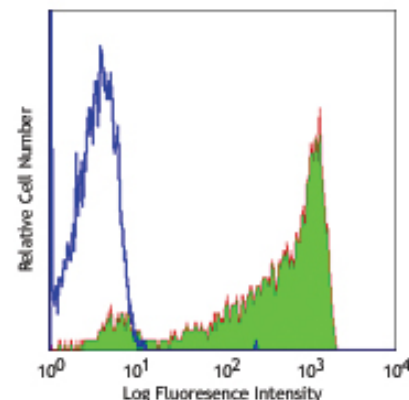
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C.



Human peripheral blood lymphocytes stained with purified MEM-55, followed by anti-mouse IgGs FITC

Applications:

Applications: FC - *Quality tested*
 IP, WB, IHC - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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
 Purified anti-human CD45RA

Purified anti-human CD45

Purified anti-human CD45RO

APC Goat anti-mouse IgG (minimal x-reactivity)

Biotin Goat anti-mouse IgG (minimal x-reactivity)

FITC Goat anti-mouse IgG (minimal x-reactivity)

HRP Goat anti-mouse IgG (minimal x-reactivity)

Purified Mouse IgG2b, κ Isotype Ctrl

PE Goat anti-mouse IgG (minimal x-reactivity)

Cell Staining Buffer

RBC Lysis Buffer (10X)

Clone

HI100

HI30

UCLH1

Poly4053

Poly4053

Poly4053

Poly4053

MPC-11

Poly4053

Application

FC, IHC, CyTOF®

FC, IHC, WB, IF, CyTOF®

FC, IHC, IP, WB

FC

FC, ELISA, IHC, IF, WB

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ELISA, IHC, WB

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