SONY

Product Data Sheet

FITC anti-human CD45RA

Catalog # / Size: 2120530 / 100 tests
2120525 / 25 tests

2120740 / 100 µg

Clone: HI100

Isotype: Mouse IgG2b, κ

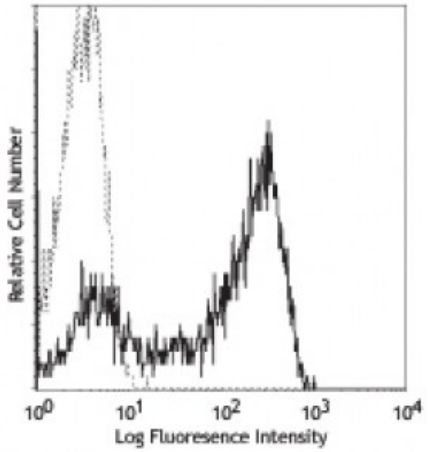
Reactivity: Human

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

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

Workshop Number: IV N906

Concentration: microg sizes: 0.2 mg/ml
test sizes: lot-specific



Human peripheral blood lymphocytes stained with HI100 FITC

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining using the microg size, the suggested use of this reagent is ≤1.0 microg per million cells in 100 microL volume. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for relevant formats of this clone) include: inhibition of CD45 functions2, immunohistochemical staining of frozen tissue sections3 and formalin-fixed paraffin-embedded tissue sections4, and immunofluorescence[15,16].

Application References:

1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
2. Yamada T, *et al.* 2002. *J. Biol. Chem.* 277:28830. (WB, Block)
3. Weninger W, *et al.* 2003 *J. Immunol.* 170:4638. (IHC)
4. Imanguli MM, *et al.* 2009. *Blood*. 113:3620 (IHC)
5. Roque S, *et al.* 2007. *J. Immunol.* 178:8028. (FC) PubMed
6. Smeltz RB. 2007. *J. Immunol.* 178:4786. (FC) PubMed
7. Palendira U, *et al.* 2008. *Blood* (FC) PubMed
8. Kuttruff S, *et al.* 2009. *Blood* 113:358. (FC) PubMed
10. Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) PubMed
11. Alanio C, *et al.* 2010. *Blood* 115:3718. (FC) PubMed
12. Iannello A, *et al.* 2010. *J. Immunol.* 184:114. (FC) PubMed
13. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
14. Guereau-de-Arellan M, *et al.* 2011. *Brain*. 134:3578. PubMed

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15. Canque B, *et al.* 2000. *Blood* 96:3748. (IF)
16. Imanguli MM, *et al.* 2009. *Blood* 13:3620. (IF)

Description: CD45RA is a 205-220 kD single chain type I glycoprotein. It is an exon 4 splice variant of the tyrosine phosphatase CD45. The CD45RA isoform is expressed on resting/naïve T cells, medullary thymocytes, B cells and monocytes. CD45RA enhances both T cell receptor and B cell receptor signaling. CD45 non-covalently associates 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.

Antigen References:

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