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Product datasheet for CL111R

Ptprc Mouse Monoclonal Antibody [Clone ID: OX-30]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OX-30
Applications:	FC
Recommended Dilution:	Suitable for use in Flow cytometry (See Protocol).
Reactivity:	Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Lymph node glycoproteins and cells.
Specificity:	This antibody recognizes a monomorphic determinant of the rat leukocyte common antigen (CD45) (1). The antigen recognized is a heavily glycosylated membrane glycoprotein of molecular weight 170,000 kDa on thymocytes but molecular weight 170,000-220,000 kDa on other leukocytes.
Formulation:	PBS with 0.02% Sodium Azide as preservative and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. Label: PE State: Liquid purified IgG fraction. Label: Conjugated to
Concentration:	lot specific
Purification:	Protein G Chromatography.
Conjugation:	PE
Storage:	Store the antibody at 2-8°C. **DO NOT FREEZE!** Avoid prolonged exposure to light.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein tyrosine phosphatase, receptor type, C
Database Link:	Entrez Gene 24699 Rat P04157

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Background: The leukocyte common antigen (L-CA) is a major glycoprotein of haematopoietic cells but is not found on other tissues or erythroid cells. It is present on greater than 95% of thymocytes, bone marrow cells and thoracic duct lymphocytes. This molecule carries much of the carbohydrate of thymocytes and shows interesting heterogeneity amongst T lymphocytes and B lymphocytes. (2,3).

Synonyms: PTPRC, Leukocyte common antigen, L-CA, T200

Note:

Protocol: **FLOW CYTOMETRY ANALYSIS:**

Method:
1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Rat cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 10e6 cells, representing 1 test).
4. To each tube, 0.5 µg-1.0 µg of CL111R or CL111RX per 10e6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
(It is recommended that the tubes are protected from light, since most fluorochromes are light sensitive.)
7. Wash 2 times at 4°C.
8. Resuspend the cell pellet in 50 µl ice cold media B.
9. Transfer to suitable tubes for flow cytometric analysis containing 15 µl of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

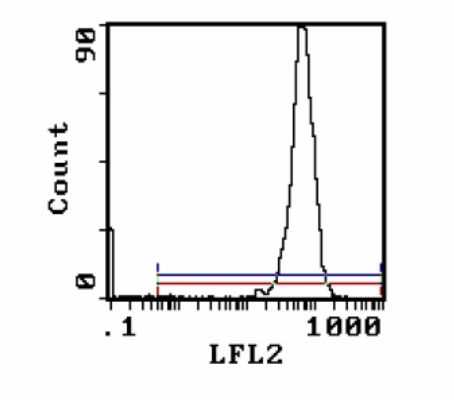
Media:
A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).

Results-Tissue Distribution: (Figure 1)
Rat Strain: Wistar
Cell Concentration: 1x10e6 cells per test.
Antibody Concentration Used: 0.5 µg/10e6 cells.
Isotypic Control: PE Mouse IgG2a.

Cell-Source Percentage of cells stained above control:
Thymus: 99.8%
Spleen: 97.1%
Lymph Node: 98.9%

Strain Distribution:
Strains Tested: Wistar, Buffalo, Brown Norway, Fischer 344
Positive: Wistar, Buffalo, Brown Norway, Fischer 344
Negative: none

Product images:



Cell Source: Spleen
Percentage of cells stained above control: 97.1%

Figure 1. Results-Tissue Distribution.