

Technical Data Sheet

FITC Rat Anti-Mouse Ly-51

Product Information

Material Number:	553160
Alternate Name:	6C3/BP-1 Antigen
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	6C3
Immunogen:	C57L mouse Pre-B lymphoma cell line L1-2
Isotype:	Rat (F344) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 6C3 antibody reacts with an epitope of the 6C3/BP-1 (Ly-51) glycoprotein cell-surface differentiation antigen, which was originally identified on pre-B cell lymphomas (spontaneous and chemical- or retrovirus- transformed, *in vitro* and *in vivo*). 6C3/BP-1 is a homodimer cell-surface glycoprotein with 140-kDa subunits which has been identified to possess aminopeptidase A (APA) activity. The same antigen is expressed at high levels on bone marrow stromal cell lines which support *in vitro* B lymphopoieses, on thymic dendritic cells and cortical epithelial cells, and on a wide variety of mouse and rat tissues known to possess APA activity. Subsets of normal bone marrow pre-B and B lymphocytes express low levels of Ly-51, which is rapidly up-regulated on the pre-B cells in the presence of IL-7. A role for the 6C3/BP-1 molecule in the IL-7-driven proliferation of B cell precursors has been postulated. However, B-cell abnormalities were not detected in Ly-51-deficient mice. Mature B lymphocytes, thymocytes, peripheral T lymphocytes, erythroid cells, and myeloid cells (with the exception of thymic dendritic cells) do not express Ly-51. The 6C3 antibody can be used to identify cortical epithelium in frozen sections of thymuses from normal, SCID, and TCR-transgenic mice. It is possible that the low level of 6C3/BP-1 antigen detected, by flow cytometry, on some thymocytes may be passively adsorbed from adjacent epithelial cells during preparation of the cell suspensions.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553929	FITC Rat IgG2a, κ Isotype Control	0.25 mg	R35-95

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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