

Technical Data Sheet

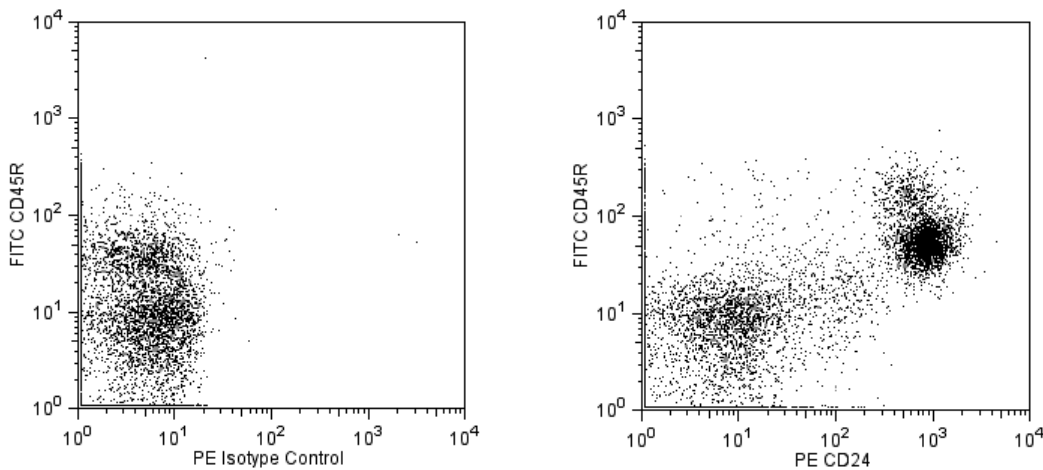
PE Mouse Anti-Rat CD24

Product Information

Material Number:	562104
Alternate Name:	HSA; Heat-stable antigen; Nectadrin; Cd24a; Signal transducer CD24
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	HIS50
Immunogen:	Rat bone marrow cells
Isotype:	Mouse IgM, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

The HIS50 monoclonal antibody specifically binds to CD24 (Heat-Stable Antigen, HSA or HsAg), a variably glycosylated GPI-anchored membrane protein. In the rat, *Cd24* mRNA is found in a variety of epithelia, neural tissue, lymph node germinal centers and thymus. The HIS50 antibody detects CD24 on most B-lineage cells in the bone marrow, on most highly surface IgM (sIgM)-positive B lymphocytes in the blood and spleen, and on marginal-zone B cells in the spleen and lymph node. Variable levels of CD24 are detected on B cells that expresses low levels of sIgM and on follicular B lymphocytes. The HIS50 antibody does not detect CD24 on rat thymocytes nor peripheral T lymphocytes, NK cells, or granulocytes. The HIS50 antibody crossreacts with intracellular antigen(s) in human lymphocytes.



Multicolor flow cytometric analysis of CD24 expression on rat bone marrow cells. Lewis rat bone marrow cells were stained with a FITC Mouse Anti-Rat CD45R antibody (Cat. No. 554880/561876) and either PE Mouse IgM, κ Isotype Control (Cat. No. 555584, Left Panel) or a PE Mouse Anti-Rat CD24 antibody (Cat. No. 562104, Right Panel). Flow cytometric fluorescence dot plots showing CD24 expression (or Ig Isotype Control staining) versus CD45R were derived from gated events with the forward and side light-scatter characteristics of viable bone marrow cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

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

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
555584	PE Mouse IgM, κ Isotype Control	100 tests	G155-228
554880	FITC Mouse Anti-Rat CD45R	0.5 mg	HIS24
561876	FITC Mouse Anti-Rat CD45R	50 μ g	HIS24

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to www.bdbiosciences.com/pharminen/protocols for technical protocols.
4. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

References

Akashi T, Shirasawa T, Hirokawa K.. Gene expression of CD24 core polypeptide molecule in normal rat tissues and human tumor cell lines.. *Virchows Arch.* 1994; 425(4):399-406. (Biology)

Hermans MH, Deenen GJ, De Boer N, Bo W, Kroese FG, Opstelten D. Expression of HIS50 Ag: a rat homologue of mouse heat-stable antigen and human CD24 on B lymphoid cells in the rat. *Immunology.* 1997; 90(1):14-22. (Immunogen: Immunofluorescence, Immunohistochemistry)

Pearce EI, Ammerlaan WA, Opstelten D.. Characterization of rat HSA/CD24 protein bearing the B lineage-restricted epitope recognized by MAb HIS50.. *Hybridoma.* 1996 February; 15(1):33-42. (Clone-specific: Western blot)