

Technical Data Sheet

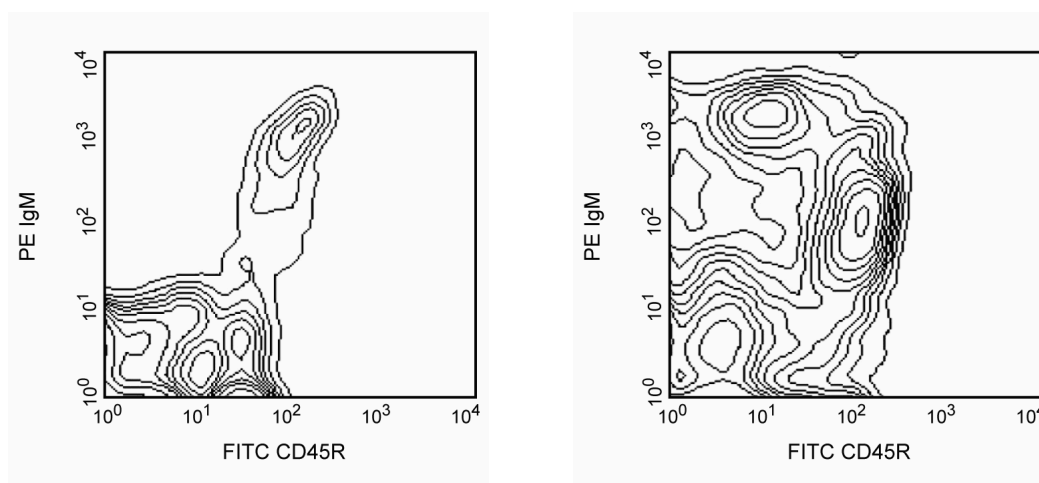
FITC Mouse Anti-Rat CD45R

Product Information

Material Number:	561876
Size:	50 µg
Concentration:	0.5 mg/ml
Clone:	HIS24
Immunogen:	Low-Density Cells from AO/G Rat Peyer's Patches
Isotype:	Mouse (BALB/c) IgG2b, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The HIS24 antibody reacts with a developmentally regulated form of CD45 found on most B lymphocytes, including developing B cells in the bone marrow and peripheral B cells, but not plasma cells. The level of expression of this CD45R antigen appears to be an indicator of both maturational stages in the B-cell lineage and of functionally distinct B-cell subsets. The HIS24 mAb, in combination with other markers such as TdT and Ig expression, is effective in the identification of B-cell progenitors. CD45 is a member of the Protein Tyrosine Phosphatase (PTP) family: Its intracellular (COOH-terminal) region contains two PTP catalytic domains, and the extracellular region is highly variable due to alternative splicing of exons 4, 5, and 6 (designated A, B, and C, respectively), plus differing levels of glycosylation. The CD45 isoforms detected in the rat are cell type-, maturation-, and activation state-specific. The CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction.



The expression of CD45R on rat B lymphocytes. Lewis bone marrow leukocytes (left panel) and splenocytes (right panel) were simultaneously stained with PE Mouse anti-Rat IgMG (Cat. No. 553888) and FITC Mouse anti-Rat CD45R monoclonal antibodies. Flow cytometry was performed on a BD FACScan™ flow cytometry 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 FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

This antibody conjugate has been tested by immunofluorescent staining (≤1 µg/million cells) in flow cytometric analysis.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
559532	FITC Mouse IgG2b, κ Isotype Control	0.25 mg	MPC-11
553888	PE Mouse Anti-Rat IgM	0.2 mg	G53-238
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

References

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