

Technical Data Sheet

PE Rat Anti-Mouse CD45RA

Product Information

Material Number:	553380
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	14.8
Immunogen:	Radiation-induced NZC mouse B lymphoma WEHI-279
Isotype:	Rat IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 14.8 clone has been reported to react with an exon A-dependent epitope of the CD45 protein, which is found at high density on B cells and at low density on peripheral T cytotoxic/suppressor cells and a very small subset of thymocytes. Nearly all B-lineage cells, including B-cell precursors in fetal liver and adult bone marrow and Ig-secreting cells, but not hematopoietic stem cells or myeloid progenitors, have been reported to be detectable by mAb 14.8. 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 mouse are cell type-, maturation-, and activation state-specific. The CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction. mAb 14.8 has been reported to enhance the proliferative effect of PHA on purified spleen T cells, possibly by replacing a signal normally delivered by accessory cells, to enhance isotype switching during in vitro B-cell responses, and to inhibit antigen-induced p21 [ras] activation.

Preparation and Storage

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.

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
553989	PE Rat IgG2b, κ Isotype Control	0.1 mg	A95-1

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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
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.

References

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