

Technical Data Sheet

PE Rat Anti-Mouse CD23

Product Information

Material Number:	561773
Alternate Name:	FcεRII
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	B3B4
Immunogen:	FcεR isolated from the mouse B hybridoma line O1.2B2
Isotype:	Rat (LOU) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The B3B4 antibody reacts with CD23, the low affinity IgE Fc receptor (FcεRII) expressed on mature resting conventional B lymphocytes, but not on B-1 cells (CD5+ B cells) or T lymphocytes. It does not react with high-affinity IgE receptors, as demonstrated on mouse mast cell lines. The regulation of CD23 surface expression on activated B cells appears to be complex, depending upon the mode of activation and the presence of cytokines. IgE synthesis is negatively regulated by CD23, and CD23 expression is upregulated on splenocytes in the presence of IgE. CD23 is also upregulated on follicular dendritic cells in the lymph nodes of immunized mice, and a subset of splenic dendritic cells expresses CD23. The B3B4 antibody abrogates antigen-specific IgE-dependent modulation of immune responses in normal mice. This monoclonal antibody also blocks IgE binding and eosinophil infiltration in the lung of immunized mice. Different in vivo results have been obtained when using the intact B3B4 antibody or the F(ab')₂ fragments. B3B4 mAb does not cross-react with rat or human IgE Fc Receptor.

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
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
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/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.
5. An isotype control should be used at the same concentration as the antibody of interest.

References

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