

30-2893: Anti-Hu IgE PE Mab(4H10)

Clonality :	Monoclonal
Clone Name :	4H10
Application :	FACS
Reactivity :	Human
Conjugate :	PE
Alternative Name :	Immunoglobulin E
Isotype :	Mouse IgG1
Immunogen Information :	Purified human IgE.

Description

Specificity: The mouse monoclonal antibody 4H10 reacts with human IgE; it recognizes an epitope different from the ones recognized by BE5 and 4G7 antibodies to IgE. The epitope is located within the amino acids 267-279 (TWLEDGQVMDVDL).

Immunoglobulin E (IgE) is a 180 kDa soluble protein serving as an antigen-specific unit of mast cell effector mechanisms. IgE has the lowest serum concentration of all immunoglobulins (approximately 0.5 mg/l) in healthy individuals, but upon allergen challenge its concentration in blood increases dramatically. Although biological survival of free IgE is very short ($T_{1/2} = 2$ days), it is stabilized after binding to its high affinity receptor. Unlike IgM- IgG- and IgA-committed B cells, IgE-switched B cells do not undergo clonal expansion.

Product Info

Amount :	0.1 mg
Purification :	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: Recommended dilution: 1-5 µg/ml.

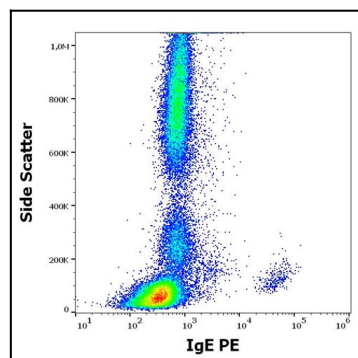


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human IgE (4H10) PE antibody (concentration in sample 3 1½g/ml).

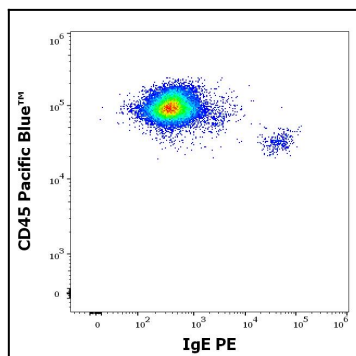


Figure 2: Flow cytometry multicolor surface staining pattern of human peripheral blood mononuclear cells using anti-human IgE (4H10) PE antibody (concentration in sample 3 $\hat{1}$ / $\hat{4}$ g/ml) and anti-human CD45 (MEM-28) Pacific Blue™ antibody (4 $\hat{1}$ / $\hat{4}$ l reagent / 100 $\hat{1}$ / $\hat{4}$ l of peripheral whole blood).

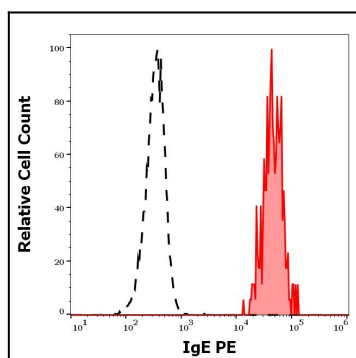


Figure 3: Separation of human basophils (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human IgE (4H10) PE antibody (concentration in sample 3 $\hat{1}$ / $\hat{4}$ g/ml).