

## 30-2864: Anti-Human IgE APC MAb(Clone :4H10)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	4H10
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	APC
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	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

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

### Application Note

Flow cytometry: Recommended dilution: 0.5-3  $\mu\text{g/ml}$

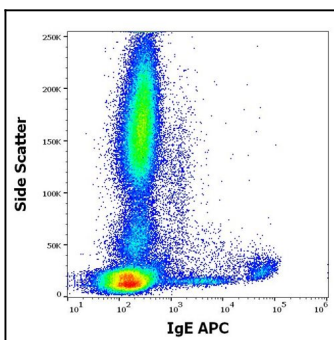


Fig 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human IgE (4H10) APC antibody (concentration in sample 9  $1\frac{1}{4}\text{g/ml}$ ).

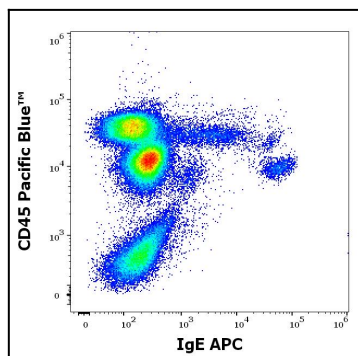


Fig 2: Flow cytometry multicolor surface staining of human leukocytes stained using anti-human IgE (4H10) APC antibody (concentration in sample 9  $\hat{1}$ / $\hat{4}$ g/ml) and anti-human CD45 (MEM-28) APC antibody (10  $\hat{1}$ / $\hat{4}$ l reagent / 100  $\hat{1}$ / $\hat{4}$ l of peripheral whole blood).

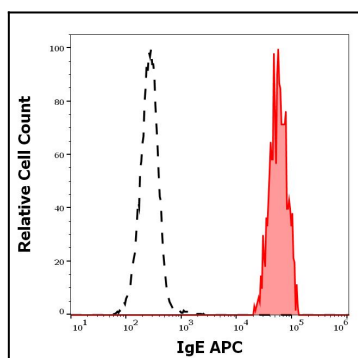


Fig 3: Separation of human IgE positive CD45dim basophil granulocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human IgE (4H10) APC antibody (concentration in sample 9  $\hat{1}$ / $\hat{4}$ g/ml).